

This is a digital copy of a book that was preserved for generations on library shelves before it was carefully scanned by Google as part of a project to make the world's books discoverable online.

It has survived long enough for the copyright to expire and the book to enter the public domain. A public domain book is one that was never subject to copyright or whose legal copyright term has expired. Whether a book is in the public domain may vary country to country. Public domain books are our gateways to the past, representing a wealth of history, culture and knowledge that's often difficult to discover.

Marks, notations and other marginalia present in the original volume will appear in this file - a reminder of this book's long journey from the publisher to a library and finally to you.

Usage guidelines

Google is proud to partner with libraries to digitize public domain materials and make them widely accessible. Public domain books belong to the public and we are merely their custodians. Nevertheless, this work is expensive, so in order to keep providing this resource, we have taken steps to prevent abuse by commercial parties, including placing technical restrictions on automated querying.

We also ask that you:

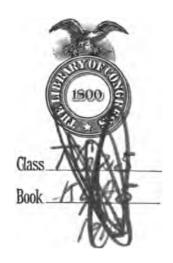
- + *Make non-commercial use of the files* We designed Google Book Search for use by individuals, and we request that you use these files for personal, non-commercial purposes.
- + Refrain from automated querying Do not send automated queries of any sort to Google's system: If you are conducting research on machine translation, optical character recognition or other areas where access to a large amount of text is helpful, please contact us. We encourage the use of public domain materials for these purposes and may be able to help.
- + *Maintain attribution* The Google "watermark" you see on each file is essential for informing people about this project and helping them find additional materials through Google Book Search. Please do not remove it.
- + *Keep it legal* Whatever your use, remember that you are responsible for ensuring that what you are doing is legal. Do not assume that just because we believe a book is in the public domain for users in the United States, that the work is also in the public domain for users in other countries. Whether a book is still in copyright varies from country to country, and we can't offer guidance on whether any specific use of any specific book is allowed. Please do not assume that a book's appearance in Google Book Search means it can be used in any manner anywhere in the world. Copyright infringement liability can be quite severe.

About Google Book Search

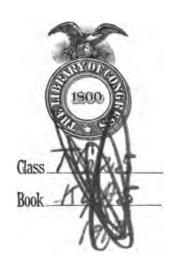
Google's mission is to organize the world's information and to make it universally accessible and useful. Google Book Search helps readers discover the world's books while helping authors and publishers reach new audiences. You can search through the full text of this book on the web at http://books.google.com/

LL KF 27 . 155 1913 Copy 1

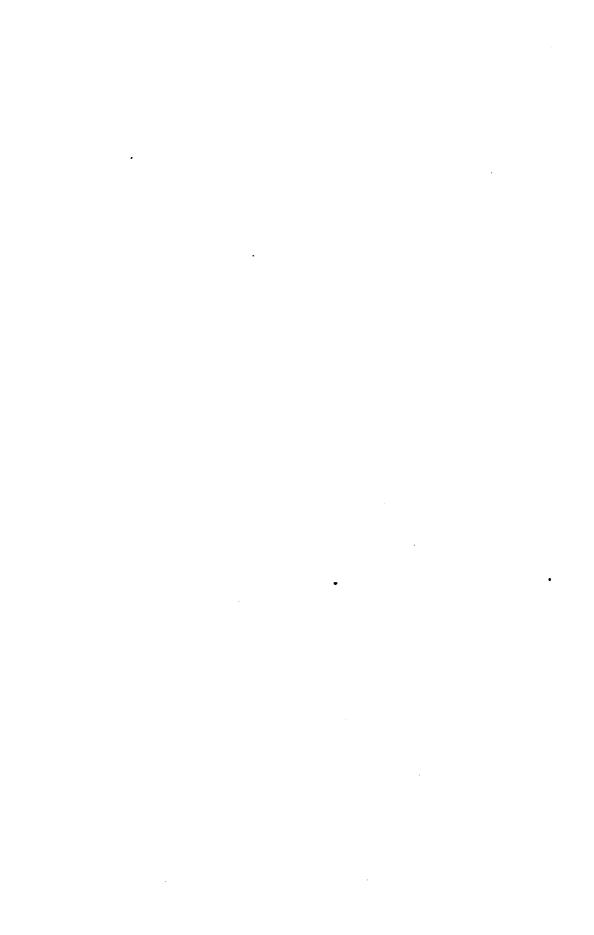








. • • • •





			!
	·		
			!
		•	•



BRIDGES AT KEOKUK, IOWA

HEARINGS

BEFORE THE

644

46

COMMITTEE ON INTERSTATE AND FOREIGN COMMERCE OF THE HOUSE OF REPRESENTATIVES

ON THE BILLS

H. R. 26559 and H. R. 26672

SIXTY-SECOND CONGRESS
THIRD SESSION

JANUARY 17, 1913



WASHINGTON
GOVERNMENT PRINTING OFFICE
1918

COMMITTEE ON INTERSTATE AND FOREIGN COMMERCE.

House of Representatives, Sixty-Second Congress.

WILLIAM C. ADAMSON, Georgia, Chairman.

WILLIAM RICHARDSON, Alabama. THETUS W. SIMS, Tennessee. WILLIAM R. SMITH, Texas. BOBERT F. BROUSSARD, Louisiana. HENRY M. GOLDFOGLE, New York. COURTNEY W. HAMLIN, Missouri. ADOLPH J. RABATH, Illinois. JOHN A. MARTIN, Colorado. J. HARRY COVINGTON, Maryland. WILLIAM A. CULLOP, Indiana.

SAMUEL W. GOULD, Maine. FRANK E. DOREMUS, Michigan.
J. H. GOEKE, Ohio.
JOHN J. ESCH, Wisconsin.
JOSEPH R. KNOWLAND, California.
WILLIAM M. CALDER, New York.
EDWARD L. HAMILTON, Michigan.
MICHAEL E. DRISCOLL, New York.
EBEN W. MARTIN, South Dakota.

WILLIS J. DAVIS, Clerk.

2

D. OF D. FEB 24 1913



GES AT KEOKUK, IOWA.

House of Representatives, COMMITTEE ON INTERSTATE AND FOREIGN COMMERCE, Washington, D. C., Friday, January 17, 1913.

The committee this day met, Hon. William C. Adamson (chariman)

presiding.

The CHAIRMAN. The committee will come to order. Gentlemen, who takes the initiative here? There are two bills. I understand there are some objectors in respect of both. Mr. McKinney, do you wish to proceed with yours?

Mr. Covington. I suspect that in view of the fact that there are

two bills it might be well to arrange for a division of time.

The CHAIRMAN. There are three parties here: Mr. McKinney,

Mr. Kennedy, and the gentlemen who oppose both bills.

Mr. Covington. It is now half past 10. You might allow them half an hour each. That will make an hour and a half which will carry us up to 12 o'clock.

The CHAIRMAN. Will that be agreeable, gentlemen? There are three sides, you know, two gentlemen each representing one project, and then there is another party who is willing to let things stay the way they are.

Mr. Hamilton. There are two bridge propositions and there is a

gentleman opposed to all bridge propositions.

Mr. Covington. I suggest half an hour a side.

Mr. E. W. MARTIN. There are really three bridge propositions. There is an existing bridge and that is antagonizing the two others.

The Chairman. That is the way I understand it. Which do you

represent, Mr. Lloyd?

Mr. Lloyd. I am here with my friends for all purposes.

Mr. Hamilton. It strikes me that while it would be desirable to shorten the hours, we might have difficulty in narrowing the time if

there are three parties with half an hour each.

The Chairman. Suppose we make a New Year's resolution, which is hard for this committee to keep, to let the witnesses tell their own stories without interruption. If it is developed in the course of the hour and a half that we need another meeting we will have another meeting in the afternoon.

Mr. Hamilton. I suggest that we ought to have a map here.

The CHAIRMAN. We will let Mr. McKinney commence. He has the first bill and he can use the first half-hour, and we will see what he develops, and then bring a new man to the bat.

Mr. McKinney. I am ready to proceed. I have Mr. Joy here from

the city of Keokuk, and he will speak first.

The Chairman. Very well. Mr. Joy, take your place at the end of the table and give your name to the stenographer.

STATEMENT OF MR. C. R. JOY, PRESIDENT OF THE KEOKUK INDUSTRIAL ASSOCIATION AND PRESIDENT OF THE INTER-CITY BRIDGE CO.

Mr. Joy. C. R. Joy, president of the Keokuk Industrial Association and president of the Intercity Bridge Co., which is asking for the passage of H. R. 26672.

The Chairman. Make your own statement as you think proper,

Mr. Joy, remembering that you are limited to a half hour.

Mr. Joy. In the early days it used to be said that there would be three great manufacturing districts on the upper Mississippi Riverone at St. Louis, one at the foot of the Des Moines River rapids where Keokuk and Hamilton are located, and at St. Paul. St. Louis and St. Paul have made good and we have been trying to make good, and believe we have now the opportunity to do so. It has also, I believe, been said by thoughtful students that the Middle West was to become the geat manufacturing district of the United States. The population has heretofore gone over us in the interest of the West, but the wave is now coming back, and the Middle West and the Mississippi Valley are settling up. The greatest markets of the world are in the Mississippi Valley; the greatest wealth of the world is in the Mississippi Valley; 38,000,000 of people are living within a radius of 500 miles of Keokuk and Hamilton. They are near the manufacturing center of the United States, near the center of population, near the center of farm products and of raw materials. It is easy, therefore, to look forward to the day when this locality in the Mississippi Valley will be a hive of industry. It has been the dream of the citizens of these two communities for three generations that the Mississippi River should be harnessed. We are at the foot of a rapids, the only available place where, we think, the Mississippi River can be dammed without creating such damage to the adjacent lands as to make it prohibitory. We have there the possibilities of developing a water power of 200,000 electrical horsepower. Franchises have been secured from Congress in the past, but we have not been able to swing the proposition because of its magnitude.

The CHAIRMAN. You have not constructed that dam yet?

Mr. Joy. We are constructing it.

The CHAIRMAN. And your time has not expired?

Mr. Joy. No, sir.

The Chairman. You had better hustle or else get these obstructions out of the way.

Mr. Joy. We have two years in which to complete.

The CHAIRMAN. Is the same company proposing to build both the

bridge and the dam?

Mr. Joy. Yes, sir. The dam is almost completed. We have been at work there for several years. We secured the assistance of Mr. Hugh L. Cooper, a man who has constructed more water-power plants than any other man in this country, and the greatest water-power authority living. He became so interested in this development that he associated himself with us, and through his efforts—he having practically sunk his own savings in surveys and prospectuses and work of that kind before the matter was finally determined—through his efforts and the efforts of local men we were able to find people who could be interested, people who would undertake the erection of

the dam and the power house, an enterprise requiring \$26,000,000. You can easily see why it was beyond the ability of the local poople to handle this proposition. The construction of this dam is very It is in the form of a bridge. I have a picture there showing From its appearance you would think it was a bridge. The piers are 6 feet thick and 30 feet apart. The dam is 42 feet wide at the base and 29 feet wide at the top. The construction is all very solid. It is placed in the solid rock bottom of the river. The ability to stand the strain against it is much greater than could be put against it. It is very differently constructed from the Johnstown dam, which had not the solid footing that we have there. The length of the dam itself is The length from the power house to the Iowa shore is 800 4,700 feet. feet. One might say that this is an interference with navigation. It is not a part of my story, but I think you will be interested in a statement of the fact that the Government had built a canal to allow navigation to go around these rapids. This dam will submerge all that and will make a pool 60 miles long. The Government will not have to maintain a channel in that pool.

Mr. STEVENS. That bill came from this committee.

Mr. Joy. Excuse me. I had forgotten you knew all about it. The construction of the dam is such that in the matter of maintaining weights it is much in excess of the requirements. That matter has been referred to the War Department, and you should have, if you have not, the report of the engineers of the War Department.

The CHAIRMAN. I think you will find out that the War Department can take care of all that if you are granted the proper consent. What we want to find out is whether it is necessary that you should have this bridge built there instead of the other; whether or not one or both are needed, and whether or not existing conditions are sufficient

without either.

Mr. Joy. I merely wanted to touch on that, Mr. Chairman, for the reason that the opposition to this bridge would probably be the same as to any other bridge, to wit, that it interferes with navigation. I wanted to anticipate that objection.

The CHAIRMAN. That will be taken care of.

Mr. Joy. I think there will be opposition to the construction of this span of 800 feet across the fore bay on the ground that navigation will be obstructed by the draw of this bridge. Now, all those questions are questions to be settled by engineers. They have been referred to the War Department. The power company has submitted blans for this proposed extension and they have been passed upon and approved by the War Department. All engineering problems will be referred to the War Department and you will have to depend on their report. I am not an engineer.

The CHAIRMAN. The channel of navigation is outside of that dam

and will be throwing the draw into the bay?

Mr. Joy. Yes

The CHAIRMAN. And there is no lock in the body of the dam?
Mr. Joy. No, sir. We now wish to bridge the fore bay and there will have to be a draw there.

Mr. Stevens. Will there have to be a bridge there?

Mr. Joy. Not necessarily.

Mr. Stevens. How is that bridge spanned?

Mr. Joy. By the power house, connecting with the dam itself—the picture will show—then the Government locks and dry docks are placed at right angles to that, which makes a fore bay, so that the water instead of going down the river from the power house is shot out into the river at right angles to the present current. Now, this creates a fore bay 1,700 or 1,800 feet long—a third of a mile. The power house is the largest single power house in the world. It creates this fore bay, as I say, and we wish to throw our bridge across the upper end of the power house, while the lock is at the other end, 1,730 feet away.

The CHAIRMAN. Then the bridge itself would not interfere with

the operation of the lock?

Mr. Joy. It is a third of a mile away from the lock.

Mr. Hamilton. Can not we have a picture fastened up here somewhere?

Mr. Joy. I would be glad to have that photograph hung on the wall. Now, in regard to the disposal of this power. It has been determined by engineers that the loss in transmission of power is 10 per cent. Before the enterprise could be financed a contract was made with St. Louis parties for 60,000 horsepower in order to guarantee some income. The transmission line for this is practically completed at this time. The loss in transmission of the power called for by this contract is 6,000 horsepower. According to Government statistics one horsepower supports five people in this country. In Switzerland it supports 6 people. So there is a loss to 30,000 people in this contract. Now, in regard to conserving our resources: There is left 140,000 horsepower to be disposed of: If saved from loss in transmission it will save to the United States the support of 70,000 We hope to do it, not only from unselfish reasons, but also from selfish reasons. The representatives of the power companies say that they will cooperate with us in every way and try to hold that power at home. A year ago, when we suggested the use of the dam as a bridge, the power company said it could never be. It has only been within the last three or four months that they have been won over and given their consent to it. Their opposition was purely

The Chairman. How do you expect to use it locally—run trains

with it or have local industrial institutions use it?

Mr. Joy. Our idea is to increase railroad facilities for crossing the river, so that eastern traffic can reach Keokuk and traffic from the West can reach Hamilton.

The CHAIRMAN. I am speaking of electrical power.

Mr. Joy (continuing). In connection with this plan for a bridge is a steam railroad proposition—

The Chairman. You are talking about a saving by avoiding transmission of 140,000 horsepower. Will there be a demand for that

locally?

Mr. Joy. I will come to that. Keokuk is a community of 16,000 people and Hamilton 2,000. We find that we must have good railroad facilities as well as other conveniences to attract manufacturing interests, and are trying to prepare our communities to take care of the demands made upon them by manufacturers. This is only one of our efforts to secure better railroad facilities. We are served now

over the Keokuk & Hamilton bridge by the T. P. & W. R. R. and the Wabash R. R.

Mr. Esch. What is the width of this dam? Mr. Joy. Twenty-nine feet.

Mr. Esch. The other bridge provided for a wagon bridge?

Mr. Joy. Yes, sir.

Mr. Esch. Yours is only for a railroad bridge?

Mr. Joy. Yes, sir.

Mr. Esch. Then the other proposition would be possibly of greater benefit to these communities by furnishing wagon facilities whereas yours is for railroad facilities?

Mr. Joy. The other bridge does not directly connect the two places.

It is farther south. It will connect-

Mr. Covington. I do not think you understood Mr. Esch. He spoke about the two projects, one of which contemplates a wagon bridge.

Mr. Joy. And the other does not contemplate the using of the dam.

Mr. Esch. But one bill provides for a wagon bridge. If the wagon bridge proposition is carried out then these cities will have more and better facilities than if your project is carried out?

Mr. Joy. We have wagon facilities but we are trying to relieve

railroad congestion.

The CHAIRMAN. The probability is that if this committee reports either of the bills it will strike out all those details and allow the bridge under the general bridge act. We will not leave the word "railroad" in either of them if it is reported. We will just say "a bridge" or "a dam" and report it under the general bridge act.

Mr. Joy. We will have to conform to whatever the bill calls for. Now, I wish to say something as to the need for increased facilities. The bridge that we now have was constructed late in the sixties and was ample for all the needs of that time, is of iron construction and was ample for railroad, wagon, and foot traffic. It took care of the railroad traffic at that time, but since the equipment of railroads has increased in weight very materially the present bridge is not capable of carrying the strain of modern traffic, so that only the smaller engines can cross the bridge. The T. P. & W. R. R. brings only its light engines over the bridge.

The CHAIRMAN. Is that owned by the railroad company or the

bridge company?

Mr. Joy. By the Keokuk & Hamilton Bridge Co., a company of which Mr. Theodore Gilman, of New York, is secretary and Andrew Carnegie is president.

The CHAIRMAN. Then the creation of a competing bridge would

interfere with the business of the present bridge?

Mr. Joy. Well, it would create competition, which would be healthy. Competition is the life of business.

Mr. Sims. Do you think you would have competition in name or in fact?

Mr. Joy. In fact.

At present there are 15 steam trains crossing the bridge between the hours of 7 a. m. and 6.10 p. m. Also 4 sand trains and 15 electric or interurban trains. The bridge rules require that no vehicle shall be allowed on the bridge within 10 minutes of the crossing of a train. If this rule was enforced the wagon traffic would be limited to 3 hours and 6 minutes a day. Now, as a matter of fact, the traffic has become so great that the bridge company has been compelled to disregard the rule, although made in the interests of the preservation of life and property, and ought to be regarded.

Mr. Sims. In case the proposed new bridge is built, will the rail-

road companies use the new bridge?

Mr. Joy. I understand the T. P. & W., the stock of which is owned partially by the Pennsylvania Railroad, is so tied up with the present bridge company that it wil remain with it, in all probability. The T. P. & W., which runs seven trains during the day, will remain there; the Interurban will continue to use the bridge because of a long-term contract; the Wabash is running eight steam trains over the bridge and at the present time is engaged in a bitter controversy with the bridge company in regard to tolls. The old toll was \$5 per car, a flat rate. Last July the bridge company tried to put into effect a new schedule of tolls, an increase of about 40 per cent over the old, and the matter is now pending before the Interstate Commerce Commission.

Mr. Esch. What weight of locomotive is allowed to pass over that bridge ?

Mr. Joy. Mr. Cole, the bridge superintendent, who is present, can answer that question.

Mr. Esch. All right.

Mr. Joy. Undoubtedly our bridge proposition will meet with opposition—very likely by the steamboat men. I think there has never been a bridge built across the Mississippi River which has not been opposed by some interest. Even the present bridge company has had a quarrel with the War Department over the construction of the bridge, and the War Department has said that it was a menace to navigation. Now, it has not proven a menace to navigation, or at least there have never been any bad accidents because of it. I presume the same objection may be made to our bridge as well as to the bridge in which Mr. McKinney is interested.

Mr. Esch. What width of span do you contemplate in the bridge

across the fore bay? Mr. Joy. 175 feet.

Mr. Esch. Now, when all the turbines in this power house are in operation there wil be a decided current down toward the fore bay?

Mr. Joy. Yes; but the intake of the power house will be from 8 to 12 feet under the surface.

Mr. Esch. Yes; but all the water goes through the forebay? Mr. Joy. Yes, sir.

Mr. Esch. If you put in piers and had a passage 175 feet in width would it not cause dangerous cross-currents that might make navigation difficult?

Mr. Joy. I would refer you to the Government engineers.

The CHAIRMAN. I think it is the outtake rather than the intake

that Mr. Esch is talking about.

Mr. Joy. I think that matter has been gone over by the engineers of the War Department and I would not attempt to make any technical explanations.

This whole enterprise has been promoted by the citizens of these communities. We are making every effort that we can to conserve

the advantages to ourselves. So far we have been met in a very kindly and courteous manner by the water-power companies. In the dam we now have a bridge, which is nearly complete. Why shouldn't we use it? You might say it should be a free bridge, toll free, but tolls are always charged in some form as the interest on the cost must always be paid to the investor. Why should we fail to use that magnificent structure as a bridge? And, gentlemen, we must have increased bridge facilities or we will have a "Chinese wall" between Keokuk and the East and Hamilton and the West. Why should not Congress help us to conserve this wonderful development of natural resources to ourselves, at the same time saving what would otherwise be a tremendous economic loss?

The CHAIRMAN. I do not think I understand the relations of the two different companies. You represent the Intercity Bridge Co.?

Mr. Joy. Yes, sir.

The CHAIRMAN. There is also a power company which built that dam?

Mr. Joy. Yes, sir.

The CHAIRMAN. It is an Iowa corporation?

Mr. Joy. The original company was an Illinois corporation. The present company is a Maine corporation.

The CHAIRMAN. You propose to make a deal with them?

Mr. Joy. Yes, sir.

The CHAIRMAN. By which you may use their structure?

Mr. Joy. Exactly.

The CHAIRMAN. As the basis of your bridge?

Mr. Joy. Exactly.

The CHAIRMAN. Now, your structure will be used to carry people

and vehicles across that bridge for pay?

Mr. Joy. Yes, sir. Now, I can say this: In view of the fact that the greater investment is already there, the small added investment to complete the structure as a bridge warrants lesser tolls than could be charged by a new bridge. I do not know what a new bridge would cost. Probably Mr. Marsh figures it at \$1,000,000 to \$2,000,000. I do not want to say one word in opposition to Mr. Marsh's bill; and will say that, with the development we expect if we can better present conditions in time we will need the other bridge in addition to this one; but we have this opportunity for a bridge at once. It is a "bird in our hands" and we want to use it. At present that 800 feet where the approach must be built is bare ground; the building organization is there to complete the structure as a bridge and it can be done at a minimum of cost. If we are delayed there will be 40 feet of water covering this ground next summer and we will have to build in 40 feet of water, greatly increasing the cost of construction. We come appealing to you to give us prompt and quick relief. We hope that this bill may be passed at this session of Congress.

Let me say again: The plans have been approved by the War Department; every objection has been met; and we can go on with

the work next week.

The CHAIRMAN. Suppose the War Department gets up a riot with the power companies, alleging that this obstructs the river, and orders the structure removed. What will become of your bridge?

Mr. Joy. It would go; and so would any bridge that might be

built if ordered out by the War Department.

The CHAIRMAN. Not by ordering the dam out?

Mr. Joy. No, sir; but I think when you grant a franchise-

The CHAIRMAN (interposing). We do not grant franchises; we simply give you permission to construct the bridge.

Mr. Joy. The bridge is already nearly constructed; the power will

be turned on next summer.

Mr. Covington. I would like to ask Mr. Joy a few questions. As a matter of fact, Mr. Joy, instead of its being the outtake of this water through the power house, is it not the intake of the turbines that will affect the current in this forebay?

Mr. Joy. Oh, yes, sir.

Mr. Covington. How many turbines have you there?

Mr. Joy. There will be 30.

Mr. Covington. Now, the water from up the river to supply all those 30 turbines will come through this boom?

Mr. Joy. Yes, sir.

Mr. Covington. And will all go down to the side of the power house and the suction from the water supply-

Mr. Joy (interposing). Twelve feet under the surface is the intake. Mr. Covington. Yes; and there will be suction enough to supply 30 turbines?

Mr. Joy. Yes, sir.

Mr. Covington. The outtake will go out to-

Mr. Joy (interposing). It goes out into the river.

Mr. Covington. Your place is right above the boom?

Mr. Joy. Yes, sir.

Mr. Covington. And you are at the upper end of the power house?

Mr. Joy. Yes. sir.

Mr. Covington. And there is one span 175 feet wide?

Mr. Joy. Yes.

Mr. Covington. Through which all navigation will have to pass?

Mr. Joy. Yes.

Mr. Covington. And it comes immediately into a very restricted forebay in which there is a current 12 feet under water?

Mr. Joy. Yes.

Mr. Covington. And the navigation must be conveyed to a lock below the forebay?

Mr. Joy. Yes, sir.

Mr. Covington. How large is that lock? Mr. Joy. One hundred and ten feet wide.

Mr. E. W. MARTIN. What did you estimate to be the cost of the

bridge?

Mr. Joy. I can not answer that. I do not know, but probably about \$200,000. Engineers should know better than I, and Government engineers might be able to give a report on that.

Mr. Stevens. Have you conferred with the navigation interests

about this matter?

Mr. Joy. No, sir; we have not.

The CHAIRMAN. Can you lessen the danger by lengthening the

Mr. Joy. We might. The bridge, however, will be built in accord-

ance with plans approved by the Government.

Mr. Sims. What is the capacity of the boats allowed to go through? How many feet wide?

Mr. Joy. I do not know. The big boats, perhaps about 350 feet long and about 89 feet wide.

Mr. Sims. And they have got to go through a 110-foot span?
Mr. Joy. One hundred and seventy-five-foot span in the bridge.

The lock is 110 feet wide, the same size as the Panama locks.

Mr. Cullop. What are the dimensions of the present locks? Mr. Joy. Eighty feet wide and I do not know how long.

Mr. Covington. Are not the present locks affected by currents

created by the power house?

Mr. Joy. No, sir; this is all new development. There will be a depth of 40 feet of water where the present Government lock is. The new lock will fill in 12 minutes, although 40 feet deep, so that it will greatly expedite the passage of boats through the locks, the three present Government locks being a greater obstruction than the new single lock.

Mr. STEVENS. You have no objection to this?

Mr. Joy. No. sir.

I believe that if our cities are to grow it will be necessary to have increased bridge facilities. We must have conditions right to make the start, and we can not make the start unless we have conditions right. We want especially to improve railroad facilities between the two cities.

Mr. Sims. Do you think, if this is granted, that it will result in a lower rate of tolls over this bridge than could be maintained on some other competing bridge, and also enable you to sell power at a lower rate?

Mr. Joy. I do not believe that our bridge companies would be philanthropists; but competition between them would naturally result in advantage to the users, or ought to. I do not know what would be the result in this case. Let me say that the cost of this short approach to the bridge dam is such that the rates can be made very moderate.

Mr. Sims. Your bridge company is not to be owned by the power

company?

Mr. Joy. We are to make an arrangement with the power company for the use of the dam as a bridge.

Mr. Sims. Will that be for a money consideration?

Mr. Joy. Yes, sir.

Mr. Sims. Then they can afford to sell their power cheaper?

Mr. Joy. They can afford to.

The CHAIRMAN. Do you have common stockholders and directors? Mr. Joy. Let me see—there is Judge Logan, who was the chairman of the committee that appeared before you several years ago; he is a local director of the power company. I do not know how much stock he has.

The CHAIRMAN. And also a director in your company?

Mr. Joy. And also a director in my company. I have no connec-

tion with the power company.

Mr. Sims. The idea that struck me was that your company using the power company's power and they using your bridge, each would be mutually aiding the other; that the power company would be enabled to sell you power at a less expense, and the bridge company would be able to operate the bridge at less expense, with consequent reduction in toll rates. Mr. Joy. Yes, sir; though it is only because of our persistent urging that they have agreed to such a use of the dam. We have tried to show them that with favorable conditions we can work together to our mutual advantage.

Mr. Sims. They can be enabled to dispose of more power locally

and not lose so much in transmission?

Mr. Joy. Yes, sir. They have agreed to give our two cities opportunity for development before they complete the installation.

The CHAIRMAN. Your time has expired, Mr. Joy.

STATEMENT OF MR. THEODORE GILMAN.

Mr. GILMAN. I suppose the next business before the committee would be to hear from the Keokuk Bridge Co., of which I am secretary and treasurer. I was elected to those offices in 1868 and have been secretary and treasurer from that time to this.

Mr. Sims. Your company does not believe in rotation in office?

Mr. GILMAN. No, sir. They have had so many hard knocks that they needed a fighter and I evidently filled the bill. I am here protecting the bridge company against this assault upon its revenue. The bridge company was opened for business in the year 1871, and the interest on its securities was guaranteed by four railroads, three of which went into the hands of receivers, and their payments were stopped and we had but one guarantor left, the result being that we have not earned our full interest. We have unpaid interest amounting to \$1,200,000 on a million dollars of bonds, and that represents our loss. All our anticipations have been disappointed. We thought that our bridge would be part of a grand avenue east and west, connecting the Pennsylvania Railroad with the Union Pacific at Omaha, and that the Pennsylvania Railroad would carry the plan through, but the panic of 1873 struck Keokuk and Keokuk was abandoned by the railroads and has continued with about 13,000 or 14,000 inhabitants for the past 40 years. If this bridge over the dam that is now proposed to be operated should be put into operation and they should take away from us one of our railroads I do not believe we could pay expenses. Congress has created this Keokuk & Hamilton Bridge Co. and we have relied upon the charter which we received, and we put in what we called a "million-dollar" bridge, but which cost \$850,000. Now, the question is whether Congress shall charter another bridge which is sure to bankrupt our concern. I want to say that that is not the way that Congress acts. We do not believe that they will do it.

Mr. Stevens. What about the charge that you will not give the

facilities that are necessary?

Mr. GILMAN. I will say to that, for the Keokuk & Hamilton Bridge Co., there never has been any business offered which it was not able to perform fully. Our facilities now are greater than the business offered. We could do at least twice as much business. In the past we have done all business offered with entire facility, and it is a false statement to say that at the present time or in any reasonably near future that our facilities are not sufficient for all the business which presents itself at that point.

Mr. Hamlin. I understood you to say awhile ago that Congress "created" this bridge company. You mean that Congress gave somebody a right to build a bridge as they wanted it?

Mr. GILMAN. Yes, sir; they granted the charter.

Mr. HAMLIN. And it was optional whether they should have availed themselves of it?

Mr. GILMAN. Yes, sir.

The CHAIRMAN. I do not think you will find any charter granted by Congress.

Mr. GILMAN. Well, I am not a lawyer.

M. Hamilton. It is considered an obstruction of a navigable

Mr. GILMAN. Yes, sir.

Mr. Hamilton. There are no restrictions in the use of the bridge? Mr. GILMAN. The law requires us to give same facilities to any railroad which presents itself. They are all on an equality.

Mr. Hamilton. When Congress gave your company the right to create the obstruction in a navigable stream there was no implication that no other company should be permitted to create another obstruction?

Mr. GILMAN. Not by Congress. But before I close I want to ask the attention of the committee to the act of the Legislature of Illinois in which they gave us "the exclusive right, privilege, and power between the city of Warsaw and the city of Nauvoo, in the county of Hancock and State of Illinois, to build, construct, use, and maintain a bridge or bridges for railroad and other purposes over the Mississippi River to the State of Iowa."

Mr. Esch. Congress reserved to itself the right to alter or amend

their act?

Mr. GILMAN. Yes, sir.

Mr. Stevens. Congress or the War Department could order that

bridge out?

Mr. GILMAN. Yes, sir; but that matter has been passed upon by the War Department several times. In the first place, before we first built our piers the representatives of the War Department were at Keokuk and we located and built them in accordance with their Then afterwards there was another crisis in our affairs and we came to Washington and met Mr. Blaine and Robert T. Lincoln, then Secretary of War, and various other officials, and we had a long discussion of the matter, and the War Department, after examining all the facts, gave us a certificate that our bridge was built in accordance with the law, which I have in my possession.

The Chairman. They did not say it was a perpetual monopoly?

Mr. GILMAN. No, sir.

Mr. Covington. Why is Congres concerned at all with whether your bridge is a success or a financial failure, except in so far as any new bridge proposed to be constructed is an obstruction to navigation? Is not that the only view with which Congress is rightfully concerned?

Mr. GILMAN. I do not think that Congress would willingly help people to go into business and then afterwards do that which would destroy that business.

Mr. Covington. Did Congress invite your bridge company originally to build this?

Mr. GILMAN. No, sir.

Mr. Covington. Did you not come here merely for the purpose of invoking the Federal Government for the right to cross a navigable stream?

Mr. GILMAN. Yes, sir.

Mr. Covington. And that is the only thing that you did?

Mr. GILMAN. Yes, sir.

Mr. Covincton. Then, if the only thing asked from Congress was the right to cross a navigable stream, as a matter of fact, if another bridge to be built there, or ten bridges to be built there do not obstruct navigation, is not Congress doing the only right thing to do in giving all of them charters, even if they know the result will be to entirely destroy your property?

Mr. GILMAN. No, sir.

Mr. Covington. If a hundred citizens want to cross any navigable stream in the United States, the question of what the financial effect will be upon some other citizen is something that Congress is not concerned with.

Mr. GILMAN. Let it go at that. I am simply showing you that it is a life and death struggle with us, and that is the reason why I am

here.

The CHAIRMAN. It is our policy to permit just as few bridges as possible, not because we desire to promote any monopolies, but because we desire to have as few obstructions as possible in any navigable river.

Mr. GILMAN. Certainly.

Mr. Covington. This committee is interested in two propositions: First, whether or not the facilities are ample for a new bridge, and, secondly, whether or not the construction of a new bridge would be an obstruction to navigation.

Mr. Hamlin. And the bridge maker takes his chances on profits?
Mr. Gilman. That is true. We took our chances on profits and

met a big loss.

But I want to submit an argument in support of the contention that Congress would not be doing the right thing in giving charters to whoever might ask for them if Congress knew that the result of giving the charters would be to destroy property of existing corporations organized in compliance with the laws of Congress and approved as legal structures by the War Department, provided they are

abundantly able to transact all business offered.

The economic idea that existing public utilities, though not the possessors of monopolistic grants, should nevertheless in the public interest be free from destructive competition, is one which has been growing widely of late. The railroad law of the State of New York, section 59, requires that no railroad corporation shall exercise the powers conferred by law, or begin the construction of its road, until the board of railroad commissioners shall certify that public convenience and a necessity require the construction of such railroad as proposed in the articles of association.

In People ex rel. N. Y. C. & H. R. R. Co. (195 N. Y., 157), it was said in substance that a certificate is to be granted upon considerations, not alone bearing upon the convenience of the public, but

affecting other transportation companies already serving the territory, and that such a transportation company is a party aggrieved

and has an interest in the controversy.

In People ex rel. Steward v. Railroad Commissioners (160 N. Y., 210) the court of appeals, through Chief Justice Parker, in speaking upon this provision of section 59 of the railroad law requiring a certificate that public convenience and necessity require the construction of the railroad, said:

Experience had shown that there were other reasons why this important question of the public convenience and necessity of a proposed railroad should be tried out and decided at the very beginning of the career of the corporation. Railroad construction was often threatened, and sometimes undertaken, with the view of securing for its promoters tribute from a railroad corporation thus threatened with competition. And again, the interests of the investors in railroad enterprises seemed to require that the promoters of such enterprises should not be permitted to undertake the construction of such a work where it was clear that public convenience and necessity did not require it. These and other reasons undoubtedly moved the legislature to provide a method by which the question of public convenience and necessity should be judicially determined at the very beginning of the corporate life of a railroad corporation, and to accomplish that result it conferred upon the board of railroad commissioners the power and the duty to hear and decide this question in all cases.

The matter of Amsterdam, J. & G. R. R. Co., in the general term of the supreme court of New York (86 Hun., at 578) was a review of the action of the board of railroad commissioners denying an application of a railroad which followed practically a route already occupied by three existing railroads. The commissioners said (p. 583):

The proposed road does not touch any community or inhabited region not now amply supplied with railroad facilities. The evidence is undisputed that the existing roads are abundantly able to transact all business now offered or that is likely to be offered for many years to come. If the charges made for transacting such business are exorbitant, there is a better method for curing this evil than by inviting superfluous competition. Furthermore, if the existing roads between Fonda and Gloversville are making exorbitant charges, this fact may indicate that there is hardly business enough to support them upon reasonable charges, in which case there is obviously no occasion to build another road in a neighborhood already oversupplied.

The court, in affirming this order of the railroad commissioners, through Justice Herrick, offered the following observations:

Petitions presenting no facts, nor the evidence thereof, but simply expressing the opinions and desires of the petitioners, are not evidence, and can not take the place of evidence. Local sentiment, aroused by the alleged misuse or abuse of an existing franchise, affords no sufficient reason for granting another franchise upon the ground that public convenience and necessity require the construction of another road.

No evidence was given to show that the amount of passenger traffic or freight traffic is so great as to require an additional road for its accommodation; and I think the evidence before the commissioners abundantly justifies their statement that "the evidence is undisputed that the existing roads are abundantly able to transact all business now offered or that is likely to be offered for many years to come."

The privilege of constructing and operating a railroad is not one that exists in the incorporators as a common right; it is a privilege or franchise that is granted by the State; and can only be obtained by complying with the laws adopted by the State regulating the granting of such franchises.

This section effected a change. It was evidently intended to restrict the building of roads not actually needed, in order to protect not only existing rall-roads, but also citizens, from investing in alluring but profitless enterprises.

The propriety and necessity of constructing a road was not left to be determined by enterprising, but perhaps ill-informed or ill-advised citizens, or by those seeking by threats of destructive competition to levy tribute upon existing roads, but was placed in the hands of accredited officers of the State, who should act for and in its behalf in determining whether the interests of the State or of the community immediately affected would be promoted by the building of a road.

The corporation applying for such a certificate necessarily holds the affirmative upon that question; it devolves upon it to show that its construction is

required by public convenience and necessity.

The certificate does not issue to it simply upon its filing its application, as a matter of right, unless evidence is produced before the board to show that public convenience and necessity do not require its construction. It is not entitled to it as a matter of right in the event of no one appearing to oppose its application; nor if any one does appear in opposition is he obliged to prove a negative and convince the board that public convenience and necessity do not require the construction of the road.

The burden of proof is upon it to establish the performance by it of the requirements of the law and to establish the existence of that condition of affairs which will authorize the State authorities to grant a franchise authoriz-

ing it to operate its road in the locality proposed.

It is applying for something from the State, and it must prove its claim to it under the laws the same as any person who attempts to establish any other claim or right.

The same idea is advanced in Elliott on Railroads, second edition, section 920a, where quotations from the New York decisions appear.

I submit also herewith galley proof of the decision by the New York Public Service Commission, dated December 31, 1912, in the matter of the New York Edison Co., and volume 1 of New York Public Service Commission Reports, in the matter of the Buffalo, Rochester & Eastern R. R., begining on page 522.

These recent decisions are in support of my position on the question whether Congress should charter another bridge at Keokuk, which is sure to injure our interests, provided we are able to do whatever business is now presented and to furnish the money to strengthen

our structure to carry any future increase of tonnage.

I would add that the piers of our bridge are amply strong enough

to carry a much heavier superstructure than the present.

I also add a copy of Freight Tariff No. 65, filed by the Western Trunk Lines with the Interstate Commerce Commission, governing all bridges over the Mississippi north of St. Louis. These tolls are low and have not been sufficient to enable us to accumulate a fund for future replacements.

Mr. Stevens. Mr. Gilman, the charge has been made against your company, I think by Mr. Joy, that the bridge is not heavy enough to accommodate large modern locomotives, with the result that locomotives have to be left at the bridge and smaller ones draw the trains

across, thereby creating an obstruction to train work.

Mr. GILMAN. Our bridge is able to carry a heavier locomotive than the Wabash tracks on their branch line to Keokuk or the Meredosia Bridge can carry, and if the Wabash wanted to send heavier locomotives over the Keokuk bridge they would have first to rebuild their track on the Keokuk branch and materially strengthen the Meredosia Bridge.

Mr. Stevens. Have you any rule as to the size of the engines that

cross your bridge?

Mr. GILMAN. While we do not want the modern style of engine to cross our bridge, the railroads do not want to use them there [indi-

cating on map] because they have not the structure there of sufficient strength to carry them, and it would be to their own damage to use heavier locomotives at the present time. You can understand, when you see Mr. Carnegie's name there as the president of our company, that there would be no difficulty in supplying the money for strengthening our bridge. The bridge at Quincy is a case in point. It was built the same time as ours at Keokuk, under the same act of Congress. The Chicago, Burlington & Quincy Railroad Co. has strengthened that structure without interfering with traffic, so that it now carries the heavy business of their road at that point. The first mortgage bondholders of the Keokuk & Hamilton Bridge Co. have recently entered into a unanimous agreement by which the company is authorized to reserve any funds in its treasury before paying interest to provide for betterments and replacements. This creates a sufficient basis for raising the money which may be needed for strengthening the bridge.

The CHAIRMAN. Would it not be advisable for the railroad company to wait until it is able to carry all the rolling stock across the

river?

Mr. Gilman. As soon as the traffic requires it, the bridge at Keokuk

will be strengthened to meet the demands upon it.

The CHAIRMAN. Is there any reason why any other part of the railroad should be strengthened rather than the bridge to carry them across the river?

Mr. GILMAN. As I say, as the business over the bridge increases,

the capacity of the bridge will be increased to carry it.

Mr. Hamlin. Is it not a fact that there are now engines which pull trains up to the bridge and then other engines take them across the bridge?

Mr. GILMAN. Mr. Cole can answer that question.

Mr. J. H. Cole. I know this: That the Wabash engines and trains pass over that bridge regardless of the tonnage. We know nothing about the capacity of their cars at the time and do not know anything about it until two months afterwards. Three or four years ago the T., P. & W. R. R. put on very heavy engines. The general superintendent asked me if I would allow it and as a matter of safety I referred the matter to the Keystone Bridge Co. and they said that there was no necessity for it, and they handle all the business from Hamilton to the bridge. Now, those are the two railroads that use the bridge, the T., P. & W., with three or four cars, and the Wabash, which uses a 50-pound rail. They have a bridge at Meredosia which could not carry the locomotives which we carry over our bridge.

Mr. Escu. Does the railroad traffic interfere with the bridge traffic

or retard it?

Mr. Cole. There is a double track. Outside of the railroad is the track for foot passage. If you are going west vehicles have to be held at the west end; if the traffic goes east, vice versa. The average length of detention, as found by men in my employ there, is from 3 to 7 minutes for vehicles. If an automobile comes along and we see we can let her go over in a minute we don't care what becomes of it.

Mr. GILMAN. I want to state that the Keokuk and Hamilton Bridge Co. has no voice in the fixing of tolls over their bridge. The tolls are all fixed by the Western Trunk Lines and they are contained in Western Trunk Schedule No. 65, which I expected to have here this morning, and those are the tolls charged by the railroads to the public.

Mr. Stevens. The Secretary of War has charge of that matter?

Mr. GILMAN. Yes, sir.

Mr. Hamilton. Two roads are using that bridge?

Mr. GILMAN. Yes, sir.
The CHAIRMAN. The Hepburn law declared that every bridge of that character is a part of the railroad, which would bring it under the jurisdiction of the Interstate Commerce Commission.

Mr. GILMAN. Now, the tolls between the railroads and the bridge company are a different matter from the tolls between the railroads

and the public.

The CHAIRMAN. I believe there is also something in the general bridge act.

Mr. Stevens. It is all under the Secretary of War.

Mr. GILMAN. The tolls which the railroads collect from the public form a trust fund which belongs to the bridge company, but as the railroads carry the trains across the bridge, they are entitled to some compensation for that. When we began the operation of our bridge the railroads gave us an exact statement of the tolls they collected and deducted 15 per cent for their services. This plan continued for perhaps 25 to 30 years. The Wabash Railroad then objected to that plan and we fixed lower tolls than 15 per cent, but that is a matter between the Wabash and ourselves.

The CHAIRMAN. Fifteen per cent of what?

Mr. GILMAN. Fifteen per cent of the tolls which the railroads collected from passengers and freight.

The CHAIRMAN. They take 85 per cent and give you 15 per cent?

Mr. GILMAN. No, sir; it is just the other way. They said we were getting too much and then we reduced the amount and gave them a larger percentage, and in October, 1910, we came to a different scale of prices. [The question being raised whether Mr. Gilman's time was exhausted, he said:] Now, Mr. Marsh has prepared that map there and he is a skillful engineer and worthy to be heard, and his opinion should be received with great respect.

Mr. Esch. Is it possible that Mr. Gilman and Mr. Marsh are together on this proposition and are getting two-thirds of the com-

mittee's time?

Mr. Marsh. I am entirely independent.

Mr. GILMAN. Allow me now to complete my statement in reference to the bridge tolls. The Wabash wanted to get a greater share of the amount collected from the public than we thought they were entitled to, and they have diverted their coal traffic in order to compel us to come to their terms and accept their views in the matter by inflicting losses of revenue upon us. I said to the Wabash people that we were willing to arbitrate the matter. I said, "Let the Interstate Commerce Commission appoint three arbitrators—who shall be their nominees, neither the railroads' nor ours, and neither the railroads nor ourselves would have anything to say about their appointment and let them decide how much the railroad is entitled to and how much the bridge is entitled to." But Mr. Delano, the president of the Wabash Railroad, said this was a matter which they did not wish to arbitrate. I am still willing to arbitrate the question of the division of tolls over our bridge, either under the supervision of the

Interstate Commerce Commission or of the War Department. this talk of our being an obstruction by reason of our high tolls is moonshine, because the railroads fix the tolls under Tariff 65, and whatever division of tolls we decide on is something the public has nothing to do with and no interest in. If the railroads should give the entire tolls to us the public would be charged just the same.

Now, as to the use of this dam for a bridge. Congress is striving to separate corporations and make them distinct and separate, as they have done in the case of the Union Pacific and Southern Pacific, and they are forbidding railroad companies to operate mines; they are separating corporations. Here is a case where one corporation is going to do two things: First, they want to operate as a dam a dam structure which they have built for that purpose; and second, as an afterthought, they want to use the same structure as a bridge, for which use it was not originally intended.

Mr. Hamlin. Do you object, then, to the proposed bridge advocated

by Mr. McKinney, which is not connected with a dam at all?
Mr. Gilman. Why, of course, if that is built the dam structure would be operated as a bridge.

Mr. Hamlin. No; I am speaking of the McKinney project.

Mr. GILMAN. Oh, no. If Mr. Marsh can get money to build a bridge to the south of us, that is so far in the distance that we would not trouble ourselves with it.

The Chairman. Are you afraid these other fellows can get the

money?

Mr. GILMAN. The Mississippi Power Co. is a powerful concern, and they are trying to go ahead.

The CHAIRMAN. They say Carnegie is backing them. Who is

backing you?

Mr. GILMAN. They have divided up the securities of their company among Boston, New York, Chicago, Toronto, Providence, and London investors. The Keokuk & Hamilton Bridge Co. is backed by the holders of its million bonds.

The CHAIRMAN. And they have got the money?

Mr. GILMAN. Yes, sir. I have no doubt the power company people have the money, and so have our bondholders.

The CHAIRMAN. And Mr. Marsh has not found any billionaire yet. Mr. GILMAN. The dam of the Mississippi Power Co. was built for one purpose, and they now propose to use it for two purposes. There is the fatal defect, because when you look at their own picture, as given in their views Nos. 871 and 861 in their bulletin No. 8, you see what the character of that arch is which is intended to support the heavy trains which will go over it, and I do not believe you could get a disinterested civil engineer to say that that is a safe thing to de.

Mr. Covington. Don't you think that the War Department will

amply protect the character of the structure?

Mr. GILMAN. Of course, they do not want to stand in the way of a great improvement; but the power people were opposed to it at the start, and they have now been won over; and the proposal to use the dam for a bridge looks like a dangerous thing. I say that if you will ask any engineer of high standing-any absolutely disinterested engineer in the United States—he will say that that is not a proper use to make of it.

The CHAIRMAN. If that becomes known their project will not draw competition enough to hurt you.

Mr. GILMAN. That is another thing.

Mr. Hamlin. You do not contend that the dam is not strong

enough?

Mr. GILMAN. Well, we had a case in Brooklyn, N. Y., sometime ago where a Mr. Cochrane lost his life. The stairway was a cement structure, and the jarring of the passing trains weakened the stairs and the whole structure collapsed, and Mr. Cochrane was thrown and killed.

Mr. Esch. It was a part of the railroad?

Mr. GILMAN. No, sir.

Mr. Esch. It was a private stair?

Mr. GILMAN. It was a public stairway that gave access to the elevated station. It was simply the jarring that was communicated to the cement stairway by these heavy trains passing which caused the collapse. Now, you are proposing to unite in two corporations two functions, viz, to operate a bridge and to operate a dam.

Mr. Stevens. Has not Congress adopted the policy of the conserva-

tion of natural resources?

Mr. GILMAN. But what governs this case is the consolidation or combination of two corporations under one and the same control.

As already intimated, I now ask the attention of the committee to the act of the Legislature of Illinois, approved February 13, 1865, which gives us the exclusive right, privilege, and power, between the city of Warsaw and the city of Nauvoo, in the county of Hancock and State of Illinois, to build, construct, and maintain and use a bridge or bridges for railroad and other purposes over the Mississippi River to the State of Iowa. The act is as follows:

An Act to incorporate the Hancock County Bridge Company.

Section 1. Be it enacted by the people of the State of Illinois, represented in the General Assembly, That Alexander Sympson, George Edmunds. jr., Francis M. Corby, William A. Patterson, Hiram G. Ferris, Robert W. McClaughery, Andrew J. Griffith, Bryant T. Scoffeld, and Phineas Kimball, jr., their associates, successors, and assigns, be, and they are hereby, incorporated and created a body corporate, under the name and style of the "Hancock County Bridge Company," with the exclusive right, privilege, and power, between the city of Warsaw and the city of Nauvoo, in the county of Hancock and State of Illinois, to build, construct, maintain, and use a bridge or bridges for railroad and other purposes over the Mississippi River to the State of Iowa, or that portion of said river within the jurisdiction of the State of Illinois, in such manner as will not materially obstruct the navigation of said river, and to connect, by railroad or otherwise, said bridge or bridges with any road or roads, railroad or railroads terminating or approximating to such bridge or bridges within this State or the State of Iowa; to unite and consolidate its franchises, stock, and property, or any portion thereof, with any bridge, road, railroad, or other company or companies, in this or any other State; to fix the amount of the capital stock; to divide, transfer, increase, or diminish the same; to create and contract debts, borrow money, lease or mortgage the whole or any part of the property, effects, or franchises of the company; to contract, bargain, and agree with any person, persons, company, companies, corporation, or corporations for and in the construction and use of said bridge or bridges, and the appurtenances; to sell or lease said bridge, bridges, or franchises, or any portion thereof, to any person, persons, company, companies, corporation or corporations, and take, condemn, and acquire the right of way, stone, and all other privileges essential and usual in the construction of the improvements herein authorized according to the laws of this State relating to the right of

way for internal improvements or other purposes. That the property and franchises be, and the same are hereby, vested in the members of said corporation, their associates, successors, or assigns; that said company, their associates, successors, or assigns, shall commence a bridge within two years from the passage of this act, and complete the same within twenty years thereafter; and said company may demand and receive, as a condition precedent to the passage of any person or property over said bridge or bridges, reasonable tolls.

SEC. 2. Said company shall have power, and they are hereby authorized, to establish and keep a ferry across said Mississippi river, at or near the place they shall locate such bridge or bridges, for the purpose of doing their own business and the business of any railroad terminating within three miles of said place established for said bridge in the transportation of the employees, passengers, and freights of said bridge company or railroad company, but for no other purpose: Provided, however, if said bridge shall be established within three miles of any regularly established ferry across the said river, then said company shall not establish and keep such ferry, unless the regularly established ferry keeper shall neglect promptly to transport across said river, at all times, day or night, all passengers, employees, and freights of said company, and of any railroad company aforesaid, when requested so to transport the same; and in case such ferry or ferry company shall neglect or refuse to, at all times, transport such employees, passengers, and freights of this company, or any such railroad company, then this company may, and are hereby authorized to establish and keep such ferry, for the purposes of transporting such employees, passengers, and freights only, and shall not be liable to or incur any penalties provided by any law of this State, either public or private, for establishing and keeping such ferry. And all laws and parts of laws that are in conflict with this charter and the powers and rights herein contained are hereby repealed, so far as they would affect this company.

Sec. 3. This act shall be taken as a public act, and take effect and be in

force from and after its passage.
Approved February 13, 1865.

Brief on Franchise of Keokuk and Hamilton Bridge Co.

A State may grant a valid and exclusive franchise to a bridge company to erect and operate a bridge across a navigable stream and provide that no other bridge shall be erected within limited distances and this franchise is a contract between the State and the corporation which the Federal Constitution protects. The Federal Government may, upon making just compensation, authorize another bridge in behalf of interstate commerce, even in violation of the bridge company's franchise.

The Chenango Bridge Co. v. the Birmington Bridge Co. (3 Wall.,

51; 18 L. E., 137).

The Legislature of New York granted the Chenango Bridge Co. a franchise to erect and operate a bridge over the Delaware River in the State of New York, and provided in the act of incorporation and the franchise that no bridge should be erected within two miles. Later the New York Legislature granted a franchise to the defendant company to erect and maintain a bridge within two miles of the plaintiff's bridge, and this action was brought in the New York courts to enjoin the defendant bridge company from maintaining its bridge which it had erected and for damages sustained by the plaintiff company by reason thereof. The Supreme Court of the United States sustained the right of the plaintiff company under its charter to prevent any bridge from being built within two miles of plaintiff's bridge and sustained the prayer of its bill perpetually enjoining the defendant company from maintaining its bridge within two miles of plaintiff's bridge and holding that the exclusive franchise to the plaintiff company was a contract between it and the State of New York which its subsequent legislature could not violate.

The case does not appear to have been overruled. Gilman v. Pennsylvania (3 Wall, 713; 18 L. E., 96).

The plaintiff in this case owned valuable wharf right on the Schuylkill River, at Philadelphia, at a port of entry where seagoing vessels landed. The city of Philadelphia under authority granted to them from the State started to erect a bridge across the river below the plaintiff which would cut off many of the seagoing vessels from reaching the wharf of plaintiff. The plaintiff filed a bill for injunction in the Federal court and the case was brought to the Supreme Court on appeal. The defendant city relied upon an act of the legislature granting right to erect the bridge and plaintiff contended that the act was a violation of the Federal Constitution which gives Congress the right to regulate commerce.

The Supreme Court of the United States upheld the act of the legislature and sustained the decree of the lower court dismissing the bill, holding that inasmuch as Congress had not passed any laws or exercised its power which were in conflict with the act of the legislature, and that hence the State had the right to grant the franchise. The power of Congress to regulate commerce comprehends the control for that purpose and to the extent necessary, of all the navigable waters of the United States which are accessible

from a State other than those in which they lie.

It is for Congress to determine when its full power shall be brought into activity, and as to the regulations and sanctions which shall be provided.

The power to authorize the building of bridges is not to be found in the Federal Constitution; it has not been taken from the States.

The States may exercise concurrent or independent power in all cases but three:

1. Where the power is lodged exclusively in the Federal Constitution.

2. Where it is given to the United States and prohibited to the States.

3. Where, from the nature and subject of the power, it must necessarily be exercised by the National Government exclusively.

The power to build bridges over navigable rivers does not fall

within either of these exceptions.

Until the dormant power of the Constitution is awakened and made effective by the appropriate legislation, the reserved power of the States is plenary; and its exercise, in good faith can not be made the subject of review by this court.

Luxton v. North River Bridge Co. (153 U. S., 525; 38 L. E., 808). This was a case in which the right of the North River Bridge Co. to erect a bridge between New York and New Jersey under their franchise from the United States Government was attacked. Condemnation proceedings were had under the charter granted by the United States Government and the case came to the Supreme Court of the United States the writ of error based upon the action of the appraisers and condemnation proceedings.

The court held that under the right to regulate commerce vested in Congress under the Federal Constitution the Federal Government had the right to grant the franchise and the bridge company under

the franchise had the right to condemn the property for the purpose of building the bridge, holding that Congress may, directly or through corporations created for that object, construct bridges for the accommodation of interstate commerce by land, and holding the action creating a corporation was constitutional.

Mr. Justice Gray, in delivering the opinion, commented upon the relative rights of the State and of the Federal Government in such

cases as follows:

"In Willamette Iron Bridge Co. v. Hatch (125 U. S., 1; 31, 629), in which it was held that section 2 of the act of February 14, 1859, chap. 33 (11 Stat. L., 383), for the admission of Oregon into the Union, providing that 'all the navigable waters of the said State shall be common highways, and forever free, as well to the inhabitants of said State as to all other citizens of the United States,' did not (533) prevent the State, in the absence of legislation by Congress,

from authorizing the erection of a bridge over such a river.

Mr. Justice Bradley, speaking for the whole court, said: "And although, until Congress acts, the States have the plenary power supposed, yet, when Congress chooses to act, it is not concluded by anything that the States, or that individuals by its authority or acquiescence, have done, from assuming entire control of the matter and abating any erections that may have been made, and preventing any others from being made, except in conformity with such regulations as it may impose. It is for this reason, namely, the ultimate (though yet unexerted) power of Congress over the whole subject matter, that the consent of Congress is so frequently asked to the erection of bridges over navigable streams. It might itself give original authority for the erection of such bridges, when called by the demands of interstate commerce by land; but, in many, perhaps the majority of cases, its assent only is asked, and the primary authority is sought at the hands of the State." (125 U. S., 12, 13; 31, 633, 634.)

The court further holding that whenever it became necessary for the accomplishment of any authority within the right of Congress to exercise the right of domain and take private land making just compensation to the owners, Congress may do this with or without the concurrent action of the State in which the land lies.

Monongahela Navigation Co. v. United States (148 U. S., 312).

In this case the appellant company owned a dam across the Monongahela River and lock, together with a franchise from the State of Pennsylvania to take toll from vessels using the lock. The dam and lock had been erected and maintained under permission given by

Congress.

Subsequently the Federal Government sought to condemn the dam and locks for the purpose of improving navigation. An act of Congress was passed in which the Secretary of War was directed to negotiate with the appellant company and agree, if possible, within certain figures on the value of the lock and dam and providing that in case of failure to agree that said lock and dam be condemned, and provided that in fixing the value of the property so condemned the franchise of the company should not be considered and that nothing should be allowed or paid for the company's franchise to take toll.

This action was held to be unconstitutional and in violation of the provisions of the fifth amendment providing private property should not be taken for public use without just compensation. It was held, Justice Brewer delivering the opinion of the court, that the franchise of the company was private property of the company and could not be taken nor destroyed without making just compensation therefor. It was held that Congress, under the right given by the Constitution to regulate commerce, had full power and authority to destroy the lock and dam, but that it had no authority to so destroy the lock and dam without making just compensation.

Upon what does the right of Congress to interfere in the matter rest? Simply upon the power to regulate commerce. This is one of the great powers of the National Government, one whose existence and far-reaching extent have been affirmed again and again by this court in its leading opinons, and the power of Congress over such natural highways as navigable streams is confessedly supreme. See among various cases in which this supremacy has been affirmed: [Citing cases.] In Wisconsin v. Duluth it was said: "It is to be observed, as preliminary to an examination of the acts of the General Government in the special matter before us, that the whole system of river and lake and harbor improvements, whether on the seacoast or on the lakes or the great navigable rivers of the interior, has for years been mainly under the control of that Government, and that whenever it has taken charge of the matter its right to an exclusive control has not been denied.

"And while this court has maintained in many cases the right of the States to authorize structures in and over the navigable waters of the States, which may either impede or improve heir navigation, in the absence of any action of the General Government in the same matter, the doctrine has been laid down with unvarying * * * uniformity that when Congress has, by any expression of its will, occupied the field, that action was conclusive of any right to the contrary asserted under State authority. The adjudged cases in this court on

this point are numerous."

And in Willamette Iron Bridge Co. r. Hatch (p. 12) the proposition was thus stated: "And although, until Congress acts, the States have the plenary power supposed, yet, when Congress chooses to act it is not concluded by anything that the States or that individuals by its authority or acquiescence have done from assuming entire control of the matter and abating any erections that may have been made and preventing any others from being made except in conformity with such regulations as it may impose." It can not be doubted, in view of the long list of authorities—for many more might be cited—that Congress has the power in its discretion to compel the removal of this lock and dam as obstructions to the navigation of the river or to condemn and take them for the purpose of promoting its navigability. In other words, it is within the competency of Congress to make such provision respecting the improvement of the Monongahela River as in its judgment the public interests demand. Its dominion is supreme.

"But, like the other power granted to Congress by the Constitution, the power to regulate commerce is subject to all the limitations imposed by such instrument, and among them is that of the fifth amendment we have heretofore quoted. Congress has supreme control over the regulation of commerce; but if in exercising that supreme control it deems it necessary to take private property, then it must proceed subject to the limitations imposed by this fifth amendment, and can take only on payment of just compensation. The power to regulate commerce is not given in any broader terms than that to establish post offices and post roads; but if Congress wishes to take private property upon which to build a post office it must either agree upon the price with the owner or in condemnation pay just compensation therefor. And if that property be improved under authority of a charter granted by the State, with a franchise to take tolls for the use of the * * * improvement in order to determine to take tolls for the use of the improvement, in order to determine the just compensation such franchise must be taken into account. Because Congress has power to take the property it does not follow that it may destroy the franchise without compensation. Whatever be the true value of that which it takes from the individual owner must be paid to him before it can be said that just compensation for the property has been made. And that which is true in respect to a condemnation of property for a post office is equally true when condemnation is sought for the purpose of improving a natural highway.

"The theory of the Government seems to be that the right of the navigation company to have its property in the river and the franchise given by the State to take tolls for the use thereof are conditional only, and that whenever the

Government, in the exercise of its supreme power, assumes control of the river it destroys both the right of the company to have its property there and the franchise to take tolls. But this is a misconception. The franchise is a vested right. The State has power to grant it. It may retake it, as it may take other private property for public uses, upon the payment of just compensation. A like though a superior power exists in the National Government. It may take it for public purposes, and take it even against the will of the State; but it can no more take the franchise which the State has given than it can any private property belonging to an individual."

The court also held, page 344, that the lock and dam company's franchise

to take toll is a contract and not mere license.

It would appear from the foregoing that the right of Congress under its power to regulate commerce between the States by granting a franchise to maintain a bridge over the dam at Keokuk can not be questioned. However, this right can not be exercised without making just compensation to the Kekuk & Hamilton Bridge Co. for their exclusive franchise to maintain a bridge at this place. The Chairman. Now, Mr. Cole.

APPENDIX A.

The People of the State of New York ex rel. The New York Edison Co., appellant, v. William R. Willcox et al., constituting the public service commission in and for the first district, and the Long Acre Electric Light & Power Co., respondents.

(Decided December 31, 1912.)

Appeal from an order of the appellate division of the Supreme Court in the first Judicial department, entered July 24, 1912, which affirmed, on certiorari, a determination of the public service commission in and for the first district.

The facts, so far as material, are stated in the opinion. Morgan J. O'Brien and John A. Garver for appellant.

Charles F. Brown for respondent, Long Acre Electric Light & Power Co. Collin, J. The determination of the public service commission, which the certiorari brought under review, was made in the proceeding instituted by the respondent, the Long Acre Electric Light & Power Co., to obtain authority to issue stock and bonds under section 69 of the public service commissions law. The first question to be considered is whether or not we should dismiss the appeal of the relator, the New York Edison Co., and the answer to that depends, in turn, upon the question whether the relator was, within the meaning of section 2127 of the Code of Civil Procedure, aggrieved by the determination. Section 69 of the public service commissions law (L. 1907, ch. 429), provides:

"A gas corporation or electrical corporation organized or existing, or hereafter incorporated, under or by virtue of the laws of the State of New York, may issue stocks, bonds, notes, or other evidence of indebtedness payable at periods of more than 12 months after the date thereof, when necessary for the acquisition of property, the construction, completion, extension, or improvement of its plant or distributing system, or for the improvement or main enance of its service or for the discharge or lawful refunding of its obligations, provided and not otherwise that there shall have been secured from the proper commission an order authorizing such issue, and the amount thereof, and stating that, in the opinion of the commission, the use of the capital to be secured by the issue of such stock, bonds, notes, or other evidence of indebtedness is reasonably required for the said purposes of the corporation. For the purpose of enabling it to determine whether or not it should issue such an order, the commission shall make such inquiry or investigation, hold such hearings and examine such witnesses, books, papers, documents, or contracts as it may deem of importance in enabling it to reach a determination. Such gas corporation or electrical corporation may issue notes, for proper corporate purposes and not in violation of any provision of this or of any other act, payable at periods of not more than 12 months wi hout such consent; but no such notes shall, in whole or in part, directly or indirectly, be refunded by any issue of stock or bonds or by any evidenec of indebtedness running for more than 12 months without the consent of the proper commission. •

When the present proceeding was commenced, section 68 of the public service commissions law contained this provision: "No gas corporation or electrical corporation incorporated under the laws of this or any other State shall begin constuction, or exercise any right or privilege under any franchise hereafter granted, or under any franchise heretofore granted but not heretofore actually exercised without first having obtained the permission and approval of the proper commission."

The public service commissions law took effect July 1, 1907.

The Long Acre Co. was incorporated April 23, 1903, pursuant to the provisions of Article VI of the transportation corporations law. Its objects were to manufacture and distribute electricity for light, heat, power, or other purposes throughout the boroughs of Manhattan and the Bronx of the city of New York. By the statute and incorporating certificate it became empowered to lay, erect, and construct suitable wires, poles, and conduits on and under the streets and public places, with the consent of the municipal authorities and in such manner and under such reasonable regulations as they might prescribe.

In February, 1908, the respondent commenced this proceeding. The public service commission, by its order of June 26, 1908, refused to authorize the issuance of the securities upon a ground, among others, that no authority to begin construction had been obtained from the commission or its predecessor, the commission of gas and electricity. The appellate division, upon a review under a writ of certiorari, reversed the order by a divided vote and ordered that the application be referred back to the commission for consideration and action within the limits of its authority. (People ex rel. Long Acre Electric L. & P. Co. v. Public Service Commission, 137 App. Div. 810.)

In December, 1910, the commission, by its order, fixed the time and place for proceeding under the order of the appellate division and caused the order to be served upon the appellant. The respondent at the outset urged upon the commissioner, who was hearing the application under section 11 of the public service commissions law, its assertion that the appellant had not the right to intervene in or be a party to and had no standing in the proceeding; that the only question remaining for the commission to decide was the amount of stock and bonds to be authorized and the purposes to which their proceeds should be applied. The appellant, in opposition, asserted that the hearing and the determination involved the right of the respondent to construct a plant and operate, and the questions: Whether the franchise under which the respondent claimed the right to operate had been actually exercised prior to July 1, 1907; whether the respondent had the right to begin construction without first having obtained the permission and approval of the commission, and asserted that it as the operating company had the right to intervene and appear as a party to the proceeding and produce evidence in its behalf.

The commissioner, without making a ruling, permitted the appellant to introduce the evidence received upon the prior hearing and to call "on behalf of the New York Edison Co." two witnesses. At the close of their examinations the counsel for respondent formulated their position in the motions "that the Edison Co. be not allowed to appear or give evidence in this proceeding except as to the securities to be allowed and the application of the proceeds," and that the testimony of the two witnesses be stricken from the record as improper and as relating to irrelevant matters. The motions were denied, with exceptions to the respondent, and the ruling made that the commission "will hear such testimony as may be presented that is germane upon the question whether the franchise has been or has not been exercised." Testimony in behalf of the appellant was then given by a score of witnesses. The respondent called witnesses in rebuttal and the issues and proof were submitted to the commission as a body upon oral and written arguments. Their order authorized the issuance of stock and bonds. Under a writ of certiorari granted the appellant the order was affirmed by the appellate division and the writ dismissed (People ex rel. New York Edison Co. r. Public Service Commission, 151 App. Div., 832) and this appeal is from the order of affirmance and dismissal.

The petition by which the respondent instituted the proceeding alleged as uses to which the securities to be issued were to be put, the acquisition of property upon which to construct power houses and substations, their construction, and the purchasing and laying of underground cables and ducts.

The legislature did not intend or enact that a corporation subject to the provisions of section 69 or section 55 (of identical effect in relation to railroads, street railroads, and common carriers) of the public-service commissions law should be given authority by the commissions to issue stock and bonds for the purposes prescribed in those sections until its right to effect those purposes was certain and complete. That law was enacted in response to a pronounced and insistent public opinion and was a radical and important modification of the relations and policy of the people toward the corporations which are its subjects. Its paramount purpose was to protect and enforce the rights of the public. It made the commissions the guardians of the public by enabling them to prevent the issue of stock and bonds for other than statutory purposes or in appreciable and unfair excess of the value of the assets securing them, and to prevent also unneeded or extortionate competition, or indifferent and unaccommodating methods of operation or oppressive or discriminating charges or rates. It provided for a regulation and control which were intended to prevent on the one hand the evils of an unrestricted right of competition, and, on the other hand, the abuse of monopoly. (People ex rel. D. & H. Co. r. Stevens, 197 N. Y., 1.) The purpose and intent of the law forbids the commissions to authorize the issue of stock and bonds under sections 69 or 55 when prescribed requirements and conditions precedent to the right of the applicant to construct and operate a plant and system or a railroad have not been fulfilled or complied with and when, perhaps, the property to be acquired or constructed may never be acquired or constructed and the bonds or stock, the issue of which is applied for, have no substantial security to rest upon. A contrary conclusion would make the authorization and avouchment of the commissions a bait and a trap for ensnaring the investing public.

The language of the sections 69 and 55 establishes the conclusion that the commissions are not empowered to authorize the issue of securities upon the application of a corporation which has not received the permission and approval provided in sections 68 or 53 or is not validly superior to the provisions of those sections. Those sections can not be evided by obtaining an order under section 69 or 55 and the permission to construct implied through it. The issue of the stock and bonds is to be authorized "when necessary for the acquisition of property, the construction, completion, extension, or improvement of its plant or distributing system, or for the improvement or maintenance of its service * * * provided and not otherwise that there shall have been secured from the proper commission an order authorizing such issue, and the amount thereof, and stating that, in the opinion of the commission, the use of the capital to be secured by the issue of such stock, bonds, notes, or other evidence of indebtedness is reasonably required for the said purposes of the corporation." The commission can not, under this language, order the issue of the securities for the purposes mentioned, unless it is satisfied that the applicant has the present and absolute right to accomplish the uses for which the securities are authorized. Problematical uses or purposes do not necessitate or require funds or capital for their execution. The commission may, perhaps, be thus satisfied from its own records, of which, of course, it may take judicial notice. Otherwise it must require allegation and proof. For the purpose of enabling it to determine whether or not it shall issue an authorizing order, it is empowered to hold hearings and examine witnesses. In the present case the petition alleged that the respondent "has the right to place wires for electric light, heat, and power in the boroughs of Manhattan and the Bronx as appears by the franchise, a copy of which accompanies this petition," much as it had not made an application under section 68 and the records of the commission did not evidence the existence of the alleged right, it was bound to establish it by proof.

The appellant was and for many years had been furnishing electricity for light, heat, and power in the boroughs of Manhattan and the Bronx. It was directly and seriously interested in this proceeding which thus involved the consideration and determination of the present right of the respondent to place wires for those uses in those boroughs or acquire property or construct a plant to be used in competition with it. The commission might legally and justly permit it to become a party to the proceeding and the determination adverse to it after its intervention was reviewable, under certiorari, upon its application as the party aggrieved thereby. (People ex rel. N. Y. C. & H. R. R. C. o. Public Service Commission, 195 N. Y., 157; People ex rel. Steward v. Board of Railroad Commissioners, 160 N. Y., 202.) The conditions justified the ruling that the appellant should intervene in and become a party to the proceeding. A contrary ruling would have been erroneous. The relation of the appellant to the subject matter and the object of the proceeding and the situation between the parties, as presented to us, is the same as when the appellant was allowed to intervene. In respect of any matter within the scope of the

intervention, it became an actor, with liberty to present its contention and obtain an adjudication, and a consequent right to have whatever was done reviewed by the appellate courts. (Matter of Attorney General v. The No. Am. Life Ins. Co., Pierson, Receiver, etc., 77 N. Y., 297; Ex parte Jordan, 94 U. S., 248; In re Michigan Cent. R. Co., 124 Fed., 727.) The following language of Judge Gray, in People ex rel. N. Y. C. & H. R. R. R. Co. v. Public Service Commission (195 N. Y., 157, 166) is pertinent to the present question: "It is also insisted by the appellant that the relator was not a party aggrieved by the action of the board of railroad commissioners. That was a question for the board and the appellate division to consider. It turned upon the facts relating to the relator's situation, as affected by the proposed railroad construction. The relator showed that it would be affected, inasmuch as it owned other roads more or less paralleling the proposed road and serving the same territory. It appeared at the hearings and was allowed to take part in the proceedings by the tribunal, as having an interest in the controversy. The certificate of public convenience and necessity is to be granted upon considerations, not alone bearing upon the convenience of the public, but affecting the other transportation companies, which are already serving the territory. They have the right to be considered and to be protected, where there is no necessity for a wider public service, against the designs of persons more interested in forcing terms from them, than in subserving the public convenience. Certainly the rights of shareholders in the existing roads demand fair consideration." The rights of shareholders in the existing roads demand fair consideration. respondent does not claim that the appellant may in another tribunal or in another action or proceeding attempt to establish its position that the respondent is not authorized to construct a plant or exercise the franchise. The appeal should not be dismissed.

The respondent has not applied under section 68 for the permission and approval of the commission, that it begin the construction of its electrical plant and system. It asserts that its right to construct it is superior to and independent of the restrictions imposed by the section. It is manifest and admitted that the language of the section as hereinbefore quoted is equivocal and may be given either of two interpretations. The one would be fully expressed as follows: "No gas corporation or electrical corporation * * * shall begin construction without first having obtained the permission and approval of the proper commission. No such corporation shall exercise any right or privilege under any franchise hereafter granted, or under any franchise heretofore granted, but not heretofore actually exercised, without first having obtained the permission and approval of the proper commission." The other would be fully expressed as follows: "No gas corporation or electrical corporation shall begin construction under any franchise hereafter granted, or under any franchise heretofore granted, but not heretofore actually exercised, without first having obtained the permission and approval of the proper commission. No such corporation shall exercise any right or privilege under any franchise hereafter granted, or under any franchise heretofore granted, but not heretofore actually exercised, without first having obtained the permission and approval of the proper commission." The commission in the first decision adopted the construction that the respondent could not begin the construction of its plant without first having obtained its permission and approval. The appellate division in reversal held that it could begin the construction because the franchise did not fall within the class of franchises "not heretofore actually exercised," thus holding in effect that any gas or electrical corporation might, under section 68 as it was at the commencement of this proceeding, begin any and all construction of its plant or system, which did not come within the franchise, without applying for and receiving the permission and approval of a commission.

The consent or franchise through which the respondent asserts its right to construct is evidenced by a resolution of the board of aldermen of the city of New York of May 31, 1887, as follows:

"Resolved, that permission and authority are hereby given and granted unto
the American Electric Manufacturing Co. the to locate and erect poles and hang wires and fixtures thereon, and to place, construct and use wires, conduits and conductors for electrical purposes, in the city of New York, in, over, and under the streets, avenues, wharves, piers, and parks therein, or adjacent thereto; according to such plans as may be directed, approved, or allowed by and subject to the powers of the electrical subway commissioners, and to the provisions of chapter 499 of the laws of 1885, and under the supervision of the commissioner of public works and of the department of public

parks, within their respective territorial jurisdiction, and subject also to all existing ordinances applicable thereto, and to all reasonable regulations of the privilege hereby conferred, which the common council may hereafter impose by ordinance or otherwise."

In March, 1906, the respondent became, through mesne assignments, the assignee of such permission and authority. (Matter of Long Acre Electric L. & P. Co., 188 N. Y., 361.)

Certain facts and established principles guide irresistibly to the conclusion that the respondent shall not begin the construction of an electric plant without first having obtained the permission and approval of the commission. It is the settled policy of the State arising through an extended and instructive experience to withdraw the unrestricted right of competition between corporations occupying through special consents or franchises the public streets and places and supplying the public with their products or utilities which are well nigh necessities. (People ex rel. New York Electric Lines Co. v. Ellison, 188 N. Y., 523; Matter of New York Electric Lines Co., 201 N. Y., 321; Willcox v. Consolidated Gas Co., 212 U. S., 19.) This policy instigated and is embodied in the public service commissions law, which was adopted in the interests and for the good of the people and should receive from the courts an activity and effect in aid of that policy within the fair and reasonable meaning of its provisions. The legislature will not be deemed to have departed in that law from that policy unless there is clear and certain language to that effect. (Matter of New York, W. & B. R. Co., 193 N. Y., 72.)

The construction given section 68 by the appellate division, as contrasted with

that adopted by the commission in its first order, thwarts the policy in two respects: Thereunder any gas or electrical corporation might begin the construction of that part of its plant which did not come under the consent without applying to the commission for its permission; and might begin, without such permission, the construction of its entire plant and system, provided it held a franchise granted and actually exercised prior to July 1, 1907. The respondent has stated, and we perceive, no ground for a legislative partiality toward the corporations holding consents existing at the adoption of the public service commissions law, or for the requirement that the permission and approval of the commission must be had for the construction under the franchise only. scrutiny of other sections of the law creates the conviction that it intends to bring under its restrictions and regulation, in so far as is lawful, the franchises, powers, and rights of the corporations existing at its enactment and to which it relates, and under the control of the commissions all construction of their plants. Section 53 in Article III of the law relating to common carriers, railroads, and street railroads provides: "Without first having obtained the permission and approval of the proper commission no railroad corporation, street railroad corporation, or common carrier shall begin the constuction of a railroad or street railroad, or any extension thereof. for which prior to the time when this act becomes a law a certificate of public convenience and necessity shall not have been granted by the board of railroad commissioners or where prior to said time said corporation or common carrier shall not have become entitled by virtue of its compliance with the provisions of the railroad law to begin such construction; nor, except as above provided in this section, shall any such corporation or common carrier exercise any franchise or right under any provision of the railroad law or of any other law not heretofore lawfully exercised, without first having obtained the permission and approval of the proper commission. * * *." upon proof of public convenience or necessity. The policy which inspired the effects of this section was as applicable to gas and electrical corporations as to the corporations it affects. The law places the former under the supervision and regulation of the commission quite as broadly as the latter. Whatever inference may be drawn from the differing phraseology of the sections 53 and 68 is overborne by the purpose of the law; moreover, it may well be that the conditions which were created between the corporations to which Article III relates and the board of railroad commissioners, and by the many statutory provisions relating to those corporations may have made inexpedient in section 53 the conciseness of the language of section 68.

Our view is further strengthened by the fact that the amendment of section 68, taking effect June 14, 1910, provided: "No gas corporation or electrical corporation shall begin construction of a gas plant or electric plant without first having obtained the permission and approval of the commission of each district within which any part of the work or construction is to be performed.

No such corporation shall exercise any right or privilege under any franchise hereafter granted, or under franchise heretofore granted but not heretofore actually exercised, or the exercise of which shall have been suspended for more than one year, without first having obtained the permission and approval of the proper commission. * * * " (Cons. Laws, ch. 48, sec. 68), upon proof of public conveyance or necessity. The amended section may correctly be deemed, through the nature of the public service commissions law, a statement in clearer terms of the intention of the original section. (People ex rel. Binghamton L., H. & P. Co. r. Stevens, 203 N. Y., 7.) A further indication of the legislative intention is in section 99 of Article V, relating to telegraph and telephone lines and companies: "No telegraph corporation or telephone corporation hereafter formed shall begin construction of its telegraph line or telephone line without first having obtained the permission and approval of the commission and its certificate of public convenience and necessity, after a hearing had upon such notice as the commission may prescribe." (Cons. Laws, ch. 48, sec. 99.)

The consent of the municipal authorities, given under the provisions of the statute, was for the construction of the part of the plant on or under the streets of the two boroughs, to be used in conducting and distributing electricity. (Transportation Corporations Law, sec. 61.) The actual exercise of the consent or franchise necessarily involved the beginning of the construction of that part of the plant. The effect of the decision of the appellate division, therefore, is that the corporation shall not begin construction under the consent without the permission and approval of the commission unless it has through an actual exercise of the consent begun construction under the consent. This inharmonious conclusion does not arise if it is held that the words "under any franchise hereafter granted, or under any franchise heretofore granted but not heretofore actually exercised" apply only to the words "or exercise any right or privilege." Another result of the appellate division decision is that the construction of the part of the plant not within the franchise, including the power houses, substations, machinery, and appliances could be had with any application to the commission, and as a consequence the corporation could apply for and receive authority to issue stock and bonds under section 69, although it might not have, or thereafter obtain, the right to construct the part of its plant essential for conducting and distributing the electricity. This is contrary to the intention of the law, as we have stated in this opinion. The commission had not the power to authorize the issue of the stock and bonds for the reason that the respondent had not its permission and approval to begin the construction of its plant.

We do not consider the question as to whether or not the franchise held by the respondent was actually exercised prior to the taking effect of the public service commissions law for the reason that the commission did not make or base the final order upon a finding of fact in regard to it.

The orders of the appellate division and the order of the commission of July 28, 1911, should be reversed, with costs in the appellate division and in this court

CULLEN, Ch. J. (dissenting). At the threshold of this case the question arises whether, in the cyes of the law, the appellant is the party aggrieved by the determination it seeks to review on appeal, for otherwise, no matter how erroneous that determination may have been, the appellant has no standing in court to prosecute the appeal, and it must be dismissed. In 1908 the respondent, claiming to be the owner of a valid franchise to furnish electric light and power in the city of New York, applied to the public service commission for authority to issue stock and bonds as required by section 12 of the gas commission act (Laws of 1905, chap. 737). The application was denied by the commissioners on the ground, among others, that the existing companies were properly serving public interests, and that it would not be to the advantage of the community to have a new company. On a writ of certiorari obtained by the petitioner this determination was reversed by the appellant division and the matter remitted to the commissioners for a further hearing (137 App. Div., 810). At the second hearing, at which the present appellant appeared in opposition to the application, the commission made an order granting leave to issue stock and bonds. The order of the commission grants merely this authority and nothing more. The present appellant thereupon sued out a writ of certiorari, and the determination of the commission was confirmed by

the appellate division (151 App. Div., 832), and from the order of the appellate division this appeal is taken.

The restriction upon the authority of a gas and electric light company to issue stock and bonds without the approval of the proper public service commission was enacted to protect the public who may invest in such securities, and also to some extent to protect the public so far as it might become a patron of the company; for every one knows that when the question of rates or price srises the appeal is always strenuously made that the holders of the securities who have invested in the same should be allowed an adequate return on their investment, though securities may not represent a real investment of capital or cutlay in the construction or maintenance of the company's plant.

In People ex rel. Delaware & Hudson Co. v. Stevens (197 N. Y., 1, 9), Judge Haight, writing for this court said: "We understand that the paramount purpose of the enactment of the public service commissions law was the protection and enforcement of the rights of the public. * * For a generation or more the public has been frequently imposed upon by the issues of stocks and bonds of public service corporations for improper purposes, without actual consideration therefor, by company officers seeking to enrich themselves at the expense of innocent and confiding investors. One of the legislative purposes in the enactment of this statute was to correct this evil by enabling the commission to prevent the issue of such stock and bonds, if upon an investigation of the facts it is found that they were not for the purposes of the corporation

enumerated by the statute and reasonably required therefor."

That this view, that the statutory provision was intended to protect the investing public, is correct is made clear by the terms of the provision itself. The company does not require the consent of the commission to enable it to borrow money or incur debt, unless it issues therefor securities of some kind, stock, bonds, or evidences of indebtedness, and in the case of evidences of indebtedness only when they are payable more than 12 months after date. Therefore if the Long Acre Co. was to borrow the money on open account or on short-term notes, no consent would be necessary. It is said by the learned counsel for the respondent: "To allow securities to be issued and then not to permit the proceeds to be used in the business of the company would be an inane and futile act, and it would also be practicing a gross deception on investors who might have purchased such securities relying upon the order of the commission." Assuming for the argument the correctness of this position, the question remains how was the appellant made the champion of the rights of the investing public so as to give it a standing in court to appeal from what it deems an erroneous decree? It does not propose to invest in the securities of the Long Acre Co. or to become a patron of its services. If the appellant can prosecute an appeal because the order of the appellate division may injuriously affect the public, then any or all of the 9,000,000 citizens of this State, or, at least, all the adults, have the same right. The real object of the appellant is to cripple a proposed competitor by rendering it difficult for the latter to obtain funds to prosecute its enterprise. In this respect it is interested in the result of this proceeding, but it is not such an increst as the law recognizes.

It often occurs that the question which determines a litigation in court is of vital importance to other parties who have controversies depending upon the determination of the same question. At such times it was the common practice of the court to allow such third parties to file briefs on the argument of the case so that their rights may not practically, though not in the eyes of the law, be decided without their having an opportunity to be heard. But such persons can not become parties to the suit. Though they should be heard at the appellate division, it would give none of them any right to appeal from an adverse decision. On the argument it was conceded that no decision that we might make in this case would be conclusive on the appellant in any litigation that may arise between the two companies, and, apart from any concession of counsel, the proposition is clear. We have already decided on an application of the Long Acre Co. to compel the subway company to assign space in the subway for the Long Acre Co.'s wires; that that company had a valid franchise and the right to furnish electric light. (Matter of Long Acre Elec. L. & P. Co., 188 N. Y., 361.) Yet even the counsel for the respondent does not claim that that decision is conclusive as to the rights of the company when challenged in this proceeding, while the counsel for the appellant claims that the true facts were not made to appear in the mandamus litigation. I think, therefore, that we should not strain to assume jurisdiction of an appeal and render

a decision which will have little practical effect when rendered. If we should affirm the order appealed from, it would not preclude the people of the State or the officials of the city of New York, or, as already said, the appellant, from questioning the existence or the validity of the Long Acre Co.'s franchise; while if we should reverse the order, it would not preclude the Long Acre Co. from borrowing money so long as it did not issue bonds or securities payable more than a year after date in acknowledgment of it.

At the time this proceeding was instituted section 68 of the public-service act required any gas or electrical corporation before beginning construction or exercising any right or privilege under any franchise thereafter granted, or heretofore granted but not actually exercised, to obtain the approval of the public-service commission. In 1910 (ch. 480) this statute was amended so as to provide:

"The commission within whose district such construction is to be made, or within whose district such right, privilege, or franchise is to be exercised, shall have power to grant the permission and approval herein specified whenever it shall, after due hearing, determine that such construction or such exercise of the right, privilege, or franchise is necessary or convenient for the public service." (Cons. Laws, ch. 48.)

To an application to exercise the franchise made under this section as amended, doubtless the appellant would be a proper party if it saw fit to intervene. By the amendment the status of gas and electric companies is made similar to that of railroad companies, as to which we have held that an existing company has a standing to oppose the granting of a franchise to a competing company. (People ex rel. N. Y. & H. R. R. R. v. Pub. Service Com., 195 N. Y., 157.) It is now suggested that the order made by the commission, though confined in terms solely to a grant of authority to issue stocks and bonds, necessarily imports the grant of a permission under section 68 as amended in 1910. The contention seems to me wholly groundless. The petitioner did not ask for any consent to commerce work, but claimed to have a valid franchise beyond the power of the commission to abrogate. The appellate division held that the amendment of 1910 had no application to the case because the proceeding had been commenced before its enactment. It seems that the franchise of a gas or electric light company, when duly granted, is property, the same as the franchise of a railroad company (People ex. rel. Woodhaven Gas Light Company v. Deehan, 153 N. Y., 528; Matter of Long Acre Electric Light & Power Co., supra), and the franchise of a railroad company can not be repealed or abrogated by the legislature (People v. O'Brien, 111 N. Y., 1), though doubtless it can be forfeited for nonuser in a judicial proceeding. (People v. Broadway R. R. Co., 126 N. Y., 29.) In People ex rel. Third Avenue Railway Company v. Public Service Comm. (203 N. Y., 299) we held that in the case of a company succeeding to the title of a valid railway franchise no consent of the publicservice commission could be made a prerequisite to the right of the company to exercise the franchise. It is not necessary to decide any of the questions here suggested.

It is urged, but not by counsel for the appellant, that the decision of the public service commission would conclude the appellant in any litigation that may hereafter arise between the parties on the question of the possession by the respondent of a valid franchise to furnish electric light and power. As already said, it was admitted by the appellant on the argument that the decision would not have that effect. The reason for that position to me seems plain. A franchise to furnish electric light and power and lay conduits for that purpose in the city streets is property, the same as other property, though it is doubtless liable to forfeiture by judical decree for nonuser or abandonment. People v. Atlantic Ave. R. R. Co., 125 N. Y., 513; People v. Broadway R. R. Co., 126 id., 29.) As between it and the appellant the respondent has the right to have the question of its original possession of such a franchise or its subsequent forfeiture or loss determined in the ordinary courts of justice in this State in the same manner as litigations relative to other property rights are disposed of. The legislature did not create—if it could, which I deny—of the public service commission a judicial tribunal to determine that question between the parties to this appeal, for it is settled law that to make a judicial decision binding the statute must provide for a notice to the parties affected and a hearing. wise it is unconstitutional. (Matter of Empire City Bank, 18 N. Y., 199; Stuart v. Palmer, 74 N. Y., 183; Remsen v. Wheeler, 105 N. Y., 573.) There is no provision in the statute requiring the public service commission to give notice to the

appellant or anyone else of the application of the respondent for leave to issue securities. Therefore, the decision of the commission could not conclude the appellant on the question of the respondent's franchise in any litigation where it might be entitled to raise the question. The voluntary appearance of the appellant before the commission would not give any greater validity to the determination of the commission because consent can not confer jurisdiction.

It may be suggested that this objection would be fatal to the rights of competitors to appear before the commission in proceedings, under section 68 of the statute, as amended in 1910, or under section 59 of the railroad law (Laws of 1890, chap. 565, as amended), or to appeal from its determination under those statutes. But those proceedings differ wholly in principle from the one before us. They require a determination by the commission of public convenience and necessity before the acquisition of a valid operative franchise. Such a determination decides no property right within constitutional protection. On the one hand, the legislature might allow any railroad company organized in compliance with the statute to build its railroad between the points designated in its articles of association, as was the law of this State until some 30 years ago. On the other hand, the legislature might require of the corporation approval of its enterprise from just such authority or tribunal as it saw fit, as the graut of a franchise is a mere matter of grace on the part of the State. Therefore, there is nothing inconsistent in the fact that while the statute does not require notice to be given to parties who might be affected by the determination of the commission, it accords them the right to intervene and protect their interests. This is the doctrine of People ex rel. Steward v. Board of Railroad Commissioners (160 N. Y., 202).

Therefore, we are brought back to the original question whether the appellant is aggrieved in law by the authority accorded the respondent to issue stock and bonds. Three cases are cited as authority for the proposition that because the appellant was allowed to intervene below it is entitled to prosecute the appeal. They are Matter of Attorney General v. North American Life Insurance Co. (77 N. Y., 297); Ex parte Jordan (94 U. S., 248); and In re Michigan Central Railroad Co (124 Fed. Rep., 727). In these cases, however, the interest of the intervenors in the litigation was direct and substantial. They asserted the right to be awarded to them funds or property which the decrees appealed from awarded to others. They would have been necessary parties to the litigation in the first instance except for the fact that being mortgage bondholders the trustees in law represented them. But the fact that a party is allowed to intervene does not allow him to prosecute an appeal, unless he is bound or affected by the order or judgment. The fact that it may remotely or contingently affect his interests does not give him the right to appeal. It must have a binding force against his rights, his person, or his property. (Ross v. Wigg, 100 N. Y., 243. See, also, Honegger v. Wettstein, 94 id., 252.)

Indeed the certiorari should not have been allowed at the instance of the appellant, for section 2122 of the Code of Civil Procedure forbids its issue to review "a determination which does not finally determine the rights of the parties with respect to the matter to be reviewed." Assuming for the argument, that the determination of the public-service commission imports as between the commission and the respondent that the latter has a valid franchise that is of no importance under the section quoted unless that decision finally determines the question as between the appellant and the respondent.

The majority of my brethren holding that the appellant is entitled to prosecute its appeal, I am brought to the consideration of the merits of the case and dissent from the decision about to be made as contravening both the settled substantive law of this State and also the settled method of procedure. The decision of my brethren proceeds on the proposition that under the public-serive law all gas and electric companies must obtain the consent of the commission, under section 68 of the act, to exercise their franchises before they can apply for leave to issue stock and bonds, and this whether the company had a valid franchise at the time of the enactment of the statute or not. In the opinion of the majority of the court it is stated: "We perceive no ground for a legislative partiality toward the corporations holding consents existing at the adoption of the public-service commissions law, or for the requirement that the permission and approval of the commission must be had for the construction under the franchise only. A scrutiny of other sections of the law creates the conviction that it intends to bring under its restrictions and regulation, in so

far as Is lawful, the franchises, powers, and rights of the corporations existing at its enactment and to which it relates, and under the control of the commissions all construction of their plants." I think there is the best of reasons for so-called legislative partiality to corporations existing at the time of the enactment of the statute; that is to say, it was beyond the power of the legislature to require any corporation having a valid franchise for supplying gas or electricity in a municipality to obtain the consent of the public-service commission as a condition precedent to the exercise of its franchise, because, under the decisions already cited in this opinion, that franchise was property and as immune from legislative attack as any other property. We have decided exactly that principle in People ex rel. Third Avenue Railroad Co. v. Public Service Commission (supra). Nor is the principle affected by the fact that the franchise might not have been actually exercised at the time. A franchise, though unexercised, is property within the constitutional safeguards. (Suburban Rapid Transit Co. v. Mayor, 128 N. Y., 510). If taken, compensation must be made for it. (Coney Island, F. H. & B. R. R. Co. v. Kennedy, 15 App. Div., 588.) As already said, the franchise may be forfeited for nonuser, but unless in the statute authorizing the acquisition of the franchise it is provided that a certain lapse of time shall operate as a forfeiture ipso facto, a forfeiture can bedecreed only by judicial proceedings in a direct action by the State. The franchise can not be questioned by other parties. (Matter of Brooklyn Elevated R. R. Co., 125 N. Y., 434.)

The only question on which the respondent's right to an issue of stock and bonds depends—the possession of a valid franchise—is not passed upon by the court. It is assumed that the respondent had exercised its franchise so far as the erection of poles, wires, fixtures, and conduits for electrical purposes in the streets, avenues, and public places of the city are concerned. A distinction is sought to be drawn between this franchise and a franchise to build an electric plant for the generation of electric power and current. This distinction seems to be wholly without foundation. A franchise to furnish gas in a municipality and to use the streets for that purpose necessarily includes the franchise to manufacture gas to be delivered; a franchise to furnish electric power through the streets of a city necessarily includes the right to construct a plant for the generation and development of electricity; a franchise to maintain a street railroad includes the right to build a car barn for the storage of cars and a horse stable for the care of horses if the right is to operate by horses, or an electric plant, if the road is to be operated by electricity. All these are inseparable incidents of the franchise and can not be severed from it. Indeed, it requires no franchise for a company to build on its own property an electric plant or a horse stable or a car barn, unless these uses constitute a nuisance against the neighbors, in which case the grant of a franchise would be no protection. (Cogswell v. N. Y., N. H. & H. R. R. Co., 103 N. Y., 10; Bohan v. Port Jervis Gas L. Co., 122 id., 18; Bly v. Edison El. Illum. Co., 172 id., 1.)

On the matter of practice it is said the court does not consider the question whether the franchise held by the respondent was actually exercised by it prior to the enactment of the public service commissions law, because the commission did not make or base the final order upon a finding of fact in regard to it. I know of no rule requiring the public service commission to make findings of fact, and, indeed, in the great mass of special proceedings—the exceptions being very few—no findings of fact are made by the tribunal of first instance, whether judicial or quasi judicial. In such cases all that is required in this court to sustain the orders appealed from is that the record should present some evidence to justify the order. The commission made no findings of fact on which the present order was based. But this is equally true of many, if not all of the orders of the public service commissions. If a new practice is to be established and the order reversed for a defect of that character, the case should be remitted to the commission for a further determination.

There are too many embarrassments attending the disposition of this case on the merits for us to enter upon its decision needlessly. The right of the Long Acre Co. to any franchise whatever can be properly determined in an action brought by the Attorney General on behalf of the people, and there it should be determined.

Haight, Hiscock and Chase, JJ., concur with Collin, J.; Vann and Willard I:artlett, JJ., concur with Cullen, Ch. J.

Orders reversed, etc.

APPENDIX B.

[Cancels Joint Freight Tariff W. T. L. No. 193.]

Freight Tariff No. 65 of Western Trunk Lines naming Mississippi River Bridge tolls at Burlington, Iowa; Clinton, Iowa; Dubuque, Iowa; Fort Madison, Iowa; Fulton, Ill.; Hannibal, Mo.; Keithsburg, Ill.; Keokuk, Iowa; Louisiana, Mo.; Quincy, Ill.; Rock Island, Ill.; Savanna, Ill., and other opposite bank points shown in Item No. 13.

[Atchison, Topeka & Santa Fe Railway, Santa Fe System No. 6614-C; Chicago & Alton Railroad, Tariff No. 2555-B; Chicago & North Western Railway, G. F. D. No. 6034-A; Chicago, Burlington & Quincy Railroad (Illinois and Iowa districts), G. F. O. No. 7621-A; Chicago Great Western Railroad, Tariff No. 1065-A; Chicago, Milwaukee & St. Paul Railway, G. F. D. No. 9825-A; Chicago, Rock Island & Pacific Railway; Illinois Central Railroad, Tariff No. 8633-A; Iowa Central Railway, Tariff No. 2555-B; Quincy, Omaha & Kansas City Railroad, Toledo, Peorla & Western Railway, Wabash Railroad.]

[Issued August 25, 1910. Effective October 1, 1910.]

ITEM No. 1. [Note.—The following tariffs were filed under W. T. L. I. C. C. No. 586.]

Railroad.	Tariff No.	Railroad.	Tariff No.
Atchison, Topeka & Santa Fe Ry. Chicago & Alton R. R. Chicago, Burlington & Quincy R. R. Chicago Great Western R. R. Chicago, Milwaukee & St. Paul R. R.	Sante Fe System No. 6614-B. G. F. D. No. 2555-A. G. F. O. No. 9482 of 1905. Series C-2819. G. F. D. No. 48474.	Chicago & North Western Ry. Illinois Central R. R. Iowa Central Ry. Toledo, Peoria & Western Ry. Wabash R. R.	No. D-4894. G. F. O. No. 2555-A.

This tariff cancels tariff numbers of individual lines as follows:

ITEM No. 2.—Issuing carriers.

This tariff is issued by W. H. Hosmer, as agent, on behalf of the following lines, under authority shown opposite each line:

!		Concu	rrence.		
Railroad.	Form FX.	No.	Form FX.	No.	Official and address.
Atchison, Topeka & Santa Fe Ry. Chicago & Alton R. R. Chicago & North Western Ry. Chicago, Burlington & Quincy R. R. Chicago Great Western R. R. Chicago, Milwaukee & St. Paul Ry Chicago, Rock Island & Pacific Ry Illinois Central R. R. Iowa Central Ry. Quincy, Omaha & Kansas City R. R.	1 1 1 1 1 1 1	13 27 24 22 22 15 17 	7 6 6 6 6 6 6 6	1 2 8 8 3 8 163 1 2 2	Ill. E. R. Puffer, G. F. A., Chicago, Ill. G. O. Somers, G. F. A., Chicago, Ill. H. E. Pierpont, G. F. A., Chicago, Ill. H. Gower, F. T. M., Chicago, Ill. H. A. Snyder, G. F. A., Chicago, Ill. V. D. Fort, G. F. A., Chicago, Ill. S. G. Lutz, G. F. A., Chicago, Ill. A. J. Bandy, G. F. A., Kansas City, Mo
Toledo, Peoria & Western Ry Wabash R. R.	i		7 6	1	D. Mowat, G. F. A., Peoria, Ill. C. H. Stinson, G. F. A., St. Louis, M.

ITEM No. 5.—Explanation of technical terms and abbreviations.

C. L.—Carloads.

Lbs.—Pounds.
L. C. L.—Less than carloads.
N. O. S.—Not otherwise specified herein.

O. R.—Owner's risk.
O. R. L.—Owner's risk of leakage.

S. U.—Set up.

ITEM No. 7.—Application.

A. On articles classified higher than first-class the bridge toll should be increased in the same proportion that the class rate is increased. See example. Example. If an article is classified as taking 21 times first class, the bridge toll will be 21 times 5 cents or 121 cents per 100 pounds.

B. When the classification of an article is changed from one class to another, by exceptions to classification the arbitrary based on the new classification will

govern, except on commodities named on pages 4 and 5.

C. When commodity rates (other than exceptions to the classification) are published, the class bridge arbitraries based on the classification of the articles as per official classification, will be added irrespective of what the commodity rates may be (except on the commodities named on pages 4 and 5), also excepting where commodity rates are published which are sixth class or less, in which event the sixth-class arbitrary will govern.

D. Articles classified in official classification as taking 15 per cent less than second class or 20 per cent less than third class. In arriving at through rates to and from Mississippi River west-bank points and Illinois pro-rating points subject to west-bank basis, on articles classified in the official classification as taking 15 per cent less than second class, or 20 per cent less than third class, it should be understood that the proper basis is to deduct 15 per cent than second class, or 20 per cent less than third class (as the case may be) from the net point rate, to which should be added the regular bridge toll arbitrary, namely, 5 cents per 100 pounds.

ITEM No. 9.—Exception to application.

Mississippi River Bridge tolls, shown herein, will not apply on local traffic between east and west bank Mississippi River points, viz.:

East Burlington, Ill., and Burlington,

East Clinton, Ill., and Clinton, Iowa. East Dubuque, Ill., and Dubuque, Iowa. East Fort Madison, Ill., and Fort Madison, Iowa.

East Keokuk (Hamilton), Ill., and Keokuk, Iowa.

Fulton, Ill., and Lyons, Iowa.

Hamilton (East Keokuk), Ill., and Keokuk, Iowa.

Keithsburg, Ill., and West Keithsburg. Iowa.

Quincy, Ill., and West Quincy, Mo. Rock Island, Ill., and Davenport, Iowa. Savanna, Ill., and Sabula, Iowa.

ITEM No. 11.—Import traffic.

On import traffic to Illinois and Mississippi River plus points shown in individual carriers' publications lawfully on file with the Interstate Commerce Commission (except Hannibal and Louisiana, Mo., and points subject to same bridge tolls), the Mississippi River Bridge tolls will be in accordance with the class rating prescribed by the Official Classification No. 36, F. S. Holbrook's I. C. C. O. C-No. 36, supplements thereto and reissues thereof.

ITEM No. 13.

Mississippi River Bridge tolls at Burlington, Iowa, Clinton, Iowa, Davenport, Iowa, Dubuque, Iowa, East Burlington, Ill., East Clinton, Ill., East Dubuque, Ill., East Fort Madison, Ill., East Keokuk (Hamilton), Ill., Fort Madison, Ill., East Rockuk (Hamilton), Ill., son, Iowa, Fulton, Ill., Hamilton (East Keokuk), Ill., Keithsburg, Ill., Keokuk, Iowa, Lyons, Iowa, Quincy, Ill., Rock Island, Ill., Sabula, Iowa, Savanna, Ill., West Keithsburg, Iowa, West Quincy, Mo., apply on shipments governed by classification governing through rates, as follows:

[Rates in cents per 100 pounds.]

Classes.	Illinois classi- fica- tion.1	West- ern classi- fica- tion.3	Official classi- fica- tion.s
FirstSecond.	5	5 5	5
15 per cent less than second. Third 20 per cent less than third.	1	5	5
Subject to rule 28Fourth	4	4	8
Sixth or A	3 3	3 3	2
Eighth or C Ninth or D Tenth or E	2 11 11	2 11 11	

¹ Rates are governed, except as otherwise provided herein, by the Illinois Classification No. 10, W. H. Hosmer's I. C. C. No. A-118, Ind. R. C. A-4, supplements thereto and reissues thereof, and by the exceptions thereto as shown in Circular No. 1-D, W. H. Hosmer's I. C. C. No. A-122, supplements thereto and reissues thereof.

Maximum L. C. L. charge.

The charge for a less than carload shipment will not be greater than the minimum carload charge for the same kind of freight.

Commodities.	Rates in cents pe 100 pounds.
otton, ç. 1	1
al and coke, c. l. ressed meats and packing house products, c. l	1 1
respect meats and packing house products, c. I.	. :
our, l. c. l., in lots of 2,000 pounds or over	
rain and grain products, c. l. ard and soft lumber, lath and shingles, c. l.	
ve stock, all kinds	1 8
allway equipment, viz:	•
Freight cars	1 1 8
Caboose or way cars	1 1 2
Locomotives and tenders (narrow gauge)	3 \$1
Locomotives and tenders (standard gauge)	3 \$1
Passenger and sleeping coaches. Baggage, mail, or express cars.	1 1
lt, cement, plaster, and stucco, c. l.	1.8
de nitrate of c 1 (destined to Ashhurn Mo. or Moner Iowa)	ł
då, nitrate of, c. l. (destined to Ashburn, Mo., or Mooar, Iowa). n (destined to Ashburn, Mo., or Mooar, Iowa). n (silver, lead, antimony, or copper), base bullion, copper residue, and copper matte, pig or instance, and lead, c. l.	

¹ Per car.

Rates are governed, except as otherwise provided herein, by the Western Classification No. 48, F. O. Becker's I. C. C. No. 6, supplements thereto and reissues thereof, and by exceptions to said classification as shown in W. T. L. Circular No. 1-D, W. H. Hosmer's I. C. C. No. A-122, supplements thereto and reissues thereof.

a Rates are governed, except as otherwise provided herein, by the Official Classification No. 36, F. S. Holbrook's I. C. C.-O. C. No. 36, supplements thereto and reissues thereof, and by exceptions to said classification as shown in C. F. A. Freight Tariff No. 130-B, J. F. Tucker's I. C. C. No. 206, supplements thereto and reissues thereof.

Mississippi River bridge tolls at East Hannibal, Ill., East Louisiana, Ill., Hannibal, Mo., Louisiana, Mo., apply following rates:

	Rates in 100 p	cents per ounds.	Mini- mum
	L. C. L.	C. L.	charge per car.
Articles not otherwise specified below	21	2 2	\$5.00 \$5,00

Commodities.

Commodity.	Rates in cents per 100 pounds.		C. L.
	L. C. L.	C. L.	charge per car
oid in carboys.	5	2	
gricultural Implements	5	2 2	
Joohol, o. r. l	2	2	
le, in woodlum	2 2	2 2	• • • • • • • • • • • • • • • • • • • •
poles, in barreis	2	2	•••••
Doles, dried.	2	2	
äphaltum	2	2	
xes, in boxes	2 2	2	
xles	2	14	84 .
abbitt metal	2	2	
acon, in bags, barrels, or casksagging, in rolls	2 2	2 2 2 2	
age in hales	2	2	·····
ags, in bales.	5	13	4.
ar iron	. 2	1	1
ark, tan	24	14	4.
arley, pearl, in kegs	2	2	
arrels, empty	5.	11 11	4.
arytes	24	11	4.
ASKets	5	2	. 5.
eans, in barrelser, packages, empty, returned	2 21	13	5.
cycles	52	. 3	5.
offer from	2	2 14	4
olts, iron, in boxes, barrels or kegs	1 2 1	i.	4
Dies	24	11111111111111111111111111111111111111	Ĭ 4.
ottles, empty, in bulk		11	4.
oxes, empty	5	15	4.
nan	2	1.5	4.
tick	2½ 5	14	4
ages, bird	2	3	5.
ns, empty	5	5	5.
rboys, empty	اقا	2	5.
ertiages, s. u	5	2	5.
rs on own wheels:	1 1		
Baggage		1.4	
Caboose	[13	
Express		13	
Freight. Mail]	14	
Passenger		16	
Sleeping		1.6	
Way	j	13	
stings, malleable iron	1 24	13	4.
ment, in barrels	21	14 14	} 4.
Same, n. o. s	29	Ĭ3	5.
nairs	2	2 2 2 11 11	5.
der, in wood, o. r. l	2	2	l 0
ay, in barrels or casks	2	14	P
Same. n. o. s.	21 21	ī.	} 4.
)&l	21	15	4.
opperas	2 1	2	l .

BRIDGES AT KEOKUK, IOWA.

Commodities-Continued.

Coffee, in boxes, barrels, or sacks 2 Cotton, compressed 2 Cotton, compressed 2 2 Cullet 2 2 Cullet 2 2 Currants, in casks 2 2 2 2 2 2 2 2 2	2 2 11 2 2 11 2 2 2 2 2 2 2 2 2 1 1 1 1	\$4.0 5.0 4.0 5.0 5.0
Cotton, compressed 2 Cullet 2½ Currants, in casks ; Demitjohns, empty 5 Draintile (earth) 2½ Fastenings, iron 5 Feathers 5 Fish, in barrels or kits 2 Flour 2 Furniture 5 Furs 5 Glass, rough vault or skylight 2 Glass, window 2 Glucose, o. r 2 Glucose, o. r 2 Glue stock, in barrels or hogsheads 2 Grain, in bulk 2 Grain, in sacks 2	2 1 2 1 2 1 2 2 2 2 2 2 2 2 2 2 2 2 2 2	5.0 4.0 5.0 4.0 5.0
Cotton, compressed 2 Cullet 2½ Currants, in casks ; Demiljohns, empty 5 Draintile (earth) 2½ Fastenings, iron 2½ Feathers 5 Fish, in barrels or kits 2 Flour 2 Furniture 5 Furs 5 Glass, rough vault or skylight 2 Glass, window 2 Glass, window 2 Glass cock, in barrels or hogsheads 2 Grain, in bulk 2 Grain, in sacks 2	11 2 2 1 1 2 2 2 2 2 2 2 2 2 2 2 2 2 2	5.0 4.0 5.0 4.0 5.0
Currants, in casks. 5 Demijohns, empty 5 Draintile (earth) 2½ Drums. 5 Fastenings, iron. 2½ Feathers. 5 Fish, in barrels or kits. 2 Finniture. 5 Furs. 5 Glass, rough vault or skylight. 2 Glass, window 3 Class, window 4 Class, window 5 Glass, window 5 Glass, window 6 Class, window 7 Class, window 9 Cla	2 11 2 11 2 2 2 2 2 2	5.0 4.0 5.0 4.0 5.0
Demiljohns, empty 5 5 Draintile (earth) 2½ Druins 5 Fastenings, iron. 5 Feathers 5 Fish, in barrels or kits 2 Flour 2 Furniture 5 Furniture 5 Furs 5 Glass, orugh vault or skylight 2 Glass, window 2 Glass, window 2 Glucose, o. r 2 Glucose, o. r 2 Grain, in bulk 2 Grain, in sacks 2 Grain, in sacks 2 Grain, in sacks 2	11 2 1 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	4.0 5.0 4.0 5.0
Draintile (earth) 2½ Drums 5 Fastenings, iron 2½ Feathers 5 Fish, in barrels or kits 2 Flour 2 Furniture 5 Furs 5 Glass, rough vault or skylight 2 Glass, window 2 Clucose, o. T 2 Glue stock, in barrels or hogsheads 2 Grain, in bulk 2 Grain in sacks 2	11 2 1 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	4.0 5.0 4.0 5.0
Fasterings, iron. 24 Feathers 5 Flath, in barrels or kits 2 Fluour 2 Furniture 5 Furniture 5 Glass, rough vault or skylight 2 Glass, window 2 Glass, window 2 Glucose, o. r 2 Glucose, o. r 2 Grain, in bulk 2 Grain, in sacks 2 Grain 2	2 11 2 2 2 2 2 2	5. 0 4. 0 5. 0
Pasterings, iron. 24 Feathers 5 Flath, in barrels or kits 2 Flour 2 Furniture 5 Furs 5 Glass, rough vault or skylight 2 Glass, window 2 Glass, in barrels or hogsheads 2 Grain, in bulk 2 Grain, in sacks 2	222222222222222222222222222222222222222	5. 0 5. 0
Fish, in barrels or kits. Flour 2 Fouriture. 5 Furs 5 Slass, rough vault or skylight. 2 Slass, window. 2 Slucose, o. r. 2 Slucose, o. r. 2 Slucostek, in barrels or hogsheads. 2 Srain, in bulk. 2 Srain, in sacks. 2	222222222222222222222222222222222222222	5.0
Cours	2 2 2 2 2 2 2 2 2	
Purs	2 2 2 2 2 2 2	
Hass, rough vault or skylight 2 Hass, window 2 Huss stock, in barrels or hogsheads 2 Grain, in bulk 2 Grain, in sacks 2	2 2 2 2	8.0
Hass, window	2 2 2	
Hacose, o. r	2	
Frain, in bulk	2	
rain, in sacks	11	
	78	
rain products (except bran)	2 2	8.0
ranite	13	4.0
Prain products (except bran)	11 11 2 2 2	4.0
Presse. axie. in harrels or kees.	2	
rease	13	4.5
lides, green	3_	
High explosives.	2 ⁻ 5 2	
Iominy, in barrels	11	4.8
Tousehold goods	2 11	5.0
10rsenoes, in kegs. 2 10rsenoes	13	4.5
ute butts	2	•••••
ard, in barrels or tierces.	2	
Hominy, in barrels. 2 Horseshoes, in kegs. 2 Household goods. 5 Hose butts. 2 Little	2 2 2 2 2 2 2	
ead, in casks or boxes	2	·····
Lime, in barrels.	11	k
Same, n. o. s	1	4.0
ive stock:		ľ
Calves, hogs, and sheep	• • • • • • •	·····
Per 1 animal		l
Per 2 animals		
Per 3 animals	15	
Accompatives and tenders, narrow gauge	9 10	
Calves, cattle, hogs, horses, mules, and sheep	3 15	
OB 23	11	4.8
No. 1-D. W. H. Hosmer's I. C. C. No. A-122	13	4.8
fachines, sewing.	2	5.0
fanure	11	4.0
farble, unwrought	iş.	4.0
deal, corn, in barrets. [deal, cottonseed. 2] [deal, oil 2] fills, fan, s. u. 5	ĩ.	4.
(eal, qil	15	● 4.4
fills, fan, s. u 5	2,	5.0
fusical instruments 5	2	5.0
fanure 24 farble, uniwrought 22 feel, cours, in barrels 22 feel, cottonseed 23 feel, cottonseed 24 feel, cottonseed 25 feel, coll 25 fills, fan, s. u. 5 fills, fan, s. u. 5 folasses, o. r. 2 fusical instruments	113 22 22 113 113 2	4.
Vails, in kegs. 2 vits, iron, in boxes, barrels, or kegs. 2	14	4.
vits, irol, in boxes, barrels, or kegs	11	4.
Dil cake. 2	iļ	1 4.4
011, cottonseed	11 11 12 2 11	4.
Onions, in barrels or sacks	2	4.0
11, in parries, 0, 1 2 10 cake 2 11 cake 2 12 cottonseed 2 13 cottonseed 2 14 cottonseed 2 15 cake 2 16 cottonseed 2 17 cottonseed 2 18 cottonseed 2 19 cottonseed 2 19 cottonseed 2 10 cottonseed 2 10 cottonseed 2 11 cottonseed 2 12 cottonseed 2 13 cottonseed 2 14 cottonseed 2 15 cottonseed 2 16 cottonseed 2 17 cottonseed 2 18 cottonseed 2 19 cottonseed 2 10 cottonseed 2 10 cottonseed 2 10 cottonseed 2 11 cottonseed 2 12 cottonseed 2 13 cottonseed 2 14 cottonseed 2 15 cottonseed 2 16 cottonseed 2 17 cottonseed 2 18 cottonseed 2 19 cottonseed 2 19 cottonseed 2 10 cottonseed	23	4.1
alis, empty	2 2 2 2	5.0
Paint, earth, in barrels	2	

^{1 \$1} per car.

¹ Dollars each.

Commodities--Continued.

Commodity.	Rates in cents per 100 pounds.		C. L. minimum charge	
·	L. C. L.	C. L.	per car.	
Pickles, in barrels or casks	2	2		
Pig iron	2	11 11 11	84.0	
Pipe, cast iron	21	1	4.0	
Plaster, in barrels	2 2 2	1	4.0	
orter, in wood	2	2° 2 4	 	
otatoes, in barrels or sacks	2	2		
owder, gun, mining, and blasting	10	4		
utty, in barrels or casks	2 2	2 2		
ags, pressed in bales	2	2		
talls, iron	24	11	4.0	
Rice, in barrels or tierces	2.	2° 14		
ods, iron	29	14	4.8	
oofing, compositionope	2	2		
ad irons, in barrels or boxes.	21 21 21 2 2 2 2 2 5	- 4		
nd itulis, ill Daireis of Doxes	- 1	2	5.0	
ales, iron alt, in barrels or sacks	8	2	4.0	
and	2 2 2 2 2 2	2 2 2 2 1 1 1 1 1 1	1 7.0	
awdust.	51	i i i	4.6	
erap iron	51	11	1 4.	
ed, flax	51	ή₹] - -'	
awar nina	51	ił	4.0	
ewer pipe	53	24	1	
hooks.	21 2 21	2 1	4.	
eves	52	2"	5.0	
8.0	24	2 11	4.6	
ag eighs, children's	5	2 2 1}	5.0	
nen common in horse	2 2	2	1	
oda, ash, in barrels or casks	2	11	4.	
oda, ash, in barrels or casks oda, nitrate of (when destined to Ashburn, Mo., or Mooar, Iowa) pikes, in boxes or kegs. prings, bed, s. u.	21	2	1	
pikés, in boxes or kegs	2 ² 5	11	4.1	
prings, bed, s. u.	5 [$\frac{\hat{2}^2}{1\frac{1}{4}}$	5.0	
8V66	24	11	4.1	
one, unwrought	21	11	4.0	
oves	21 21 5 2 2 2	2 2 2 2 1	5.0	
igar, in barrels or hogsheads	2	2		
allow	2	2		
ar, in barrels	2	2,	1	
ies, railroad	29	19	4.1	
in plateobacco, leaf, in cases or hogsheads	2 2 2	2		
obacco, plug	5	5		
ubs, empty	5	5	5.0	
arnich in harrele or		5	5.	
arnish, in barrels, o. r	2 2	2	0.1	
agons, children's	5	2	5.0	
/heels, car	21	2 2 2 2 2 2 2 2 1	4.1	
hisky, o. r. l	$\bar{2}^{\mathbf{z}}$	2"	I	
hitalend in kees	21 2 2 2 2 2	2	 	
hiting, in barrels	2	11	h .	
Same, n. o. s	21	1	} 4.0	
'illow ware	5	11 12 2 11	5.0	
7 ire, fence	2		4.8	
rood, for fuel	21	11	4.0	
inc, in casks	0 1	2		

[Cancels Supplement No. 6. Supplement No. 7 contains all changes from the original tariff that are effective on the date hereof.]

Supplement No. 7 to freight tariff No. 65 of western trunk lines naming Mississippi River bridge tolls at Burlington, Iowa; Clinton, Iowa; Dubuque, Iowa; Fort Madison, Iowa; Fulton, Ill.; Hannibal, Mo.; Keithsburg, Ill.; Keokuk, Iowa; Louisiana, Mo.; Quincy, Ill.; Rock Island, Ill.; Savanna, Ill., and other opposite bank points shown in item No. 13-C herein.

[Atchison, Topeka & Santa Fe Bailway, Santa Fe System No. 6614—C; Chicago & Alton Railroad, Tariff No. 2555—B; Chicago & North Western Railway, G. F. D. No. 6034—A; Chicago, Burlington & Quincy Railroad (Illinois and Iowa districts), G. F. O. No. 7621—A; Chicago Great Western Railroad, Tariff No. 1656—A; Chicago, Milwaukee & St. Paul Railway, G. F. D. No. 9825—A; Chicago, Rock Island & Pacific Railway, Tariff No. 26198—A; Illinois Central Railroad, Tariff No. 8633—A; Minneapolis & St. Louis Railroad, Tariff No. 2555—B; Missouri, Kansas & Texas Railway, Tariff No. 3128—A; Quincy, Omaha & Kansas City Railroad; Toledo, Peoria & Western Railway; Wabash Railroad, F. A. Delano, W. K. Bixby, E. B. Pryor, receivers.

[Issued August 31, 1912. Effective October 4, 1912. Except as noted in individual items.]

Carriers parties hereto are as shown in tariff, except: Addition:

- (4) Add Tariff No. 28193-A of the Chicago, Rock Island & Pacific Railway.
- (3) Add Tariff No. 3128-A of the Missouri, Kansas & Texas Railway.
- (4) Add the Quincy, Omaha & Kansas City Railroad, FX6-No. 17, A. J. Bandy, general freight agent, Kansas City, Mo. Changes:
 - (1) Change the official of the Chicago & Alton Railroad to read C. A. King,
 - freight traffic manager, Chicago, Ill.

 (2) Change the Iowa Central Ruilway to read Minneapolis & St. Louis Railroad, S. G. Lutz, traffic manager, Minneapolis, Minn.

 - Reissue.
 Reissue.< (4) Reissue. Effective August 1, 1912, in Supplement No. 6.

ITEM No. 7.

[Change. Reissue. Effective May 1, 1912, in Supplement No. 5.]

Application.

A. On articles classified higher than first class the bridge toll should be increased in the same proportion that the class rate is increased. See example. Example.—If an article is classified as taking 21 times first class, the bridge toll will be 2½ times 5 cents, or 12½ cents, per 100 pounds.

B. When the classification of an article is changed from one class to another, by exceptions to classification the arbitrary based on the new classification will govern, except on commodities named on pages 4 and 5 of tariff as amended.

C. When commodity rates (other than exceptions to the classification) are published, the class bridge arbitraries based on the classification of the articles as per official classification, will be added, irrespective of what the commodity rates may be (except on the commodities named on pages 4 and 5) of tariff as amended, also excepting where commodity rates are published which are

sixth class or less, in which even the sixth-class arbitrary will govern.

D. Articles classified in official classification as taking 15 per cent less than second class or 20 per cent less than third class.—In arriving at through rates to and from Mississippi River west-bank points and Illinois prorating points, subject to west-bank basis, on articles classified in the official classification as taking 15 per cent less than second class or 20 per cent less than third class, it should be understood that the proper basis is to deduct 15 per cent less than second class or 20 per cent less than third class (as the case may be) from the net point rate, to which should be added the regular bridge toll arbitrary, namely, 5 cents per 100 pounds.

E. Articles shown in exceptions to the official classification (freight tariff No. 130-E, Eugene Morris's I. C. C. No. 339, W. H. Hosmer's I. C. C. No. A-310)

us taking 126 per cent of fourth class, 90 per cent of fifth class, and any percentage of sixth class.—In arriving at through rates to and from Mississippi River west-bank points and Illinois prorating points, subject to west-bank basis, on articles shown in exceptions to the official classification as taking percentages of the fourth, fifth, and sixth class rates as shown above, it should be understood that the proper basis is to take 128 per cent of the fourth class, 90 per cent of the fifth class, or any percentage of the sixth class rates (as the case may be) of the net point rate, to which should be added the regular bridge toll, arbitrary as shown in item No. 13—C, page 3 herein.

ITEM No. 9-A.1

[Cancels 9. Effective October 1, 1912.]

Exception to application.

Mississippi River bridge tools shown herein will not apply on local traffic between east and west bank Mississippi River points, viz: East Burlington, Ill., and Burlington, Iowa; East Clinton, Ill., and Clinton, Iowa; East Dubuque, Ill., and Dubuque, Iowa; East Fort Madison, Ill., and Fort Madison, Iowa; East Keokuk (Hamilton), Ill., and Keokuk, Iowa; Fulton, Ill., and Lyons, Iowa; Hamilton (East Keokuk), Ill., and Keokuk, Iowa; Keithsburg, Ill., and West Keithsburg, Iowa; Quincy, Ill., and West Quincy, Mo.; Rock Island, Ill., and Davenport, Iowa; Savanna, Ill., and Sabula, Iowa; nor in connection with proportional rates to and from east Mississippi River crossings on trans-Mississippi River traffic.

Change. Pages 4 and 5 of tariff. Reissue. Effective August 1, 1911, in Supplement No. 4.

Mississippi River bridge tolls at East Hannibal, Ill.; East Louisiana, Ill.; Hannibal, Mo.; Louisiana, Mo.; apply following rates:

	Rates, in 100 po	cents, per unds.	Minimum charge, in dollars, per car.
Articles not otherwise specified on pages 4 and 5 of tariff, as amended Articles which require an entire car		2 2	5 15

¹ Except as specified on pages 4 and 5 of tariff as amended.

Commodities,

Commodity.	Rates, in 100 pc	cents, per unds.	
	L.C.L.	C. L.	charge per car.
Salt, in barrels, sacks, or in bulk	2	15	84

ITEM No. 13-C.

[Cancels Item No. 13-B. Reissue. Effective May 1, 1912, in Supplement No. 5.]

Mississippi River bridge tolls at Burlington, Iowa; Clinton, Iowa; Davenport, Iowa, Dubuque, Iowa; East Burlington, Ill.; East Clinton, Ill.; East Dubuque, Ill.; East Fort Madison, Ill.; East Keokuk (Hamilton), Ill.; Fort Madison, Iowa; Fulton, Ill.; Hamilton (East Keokuk), Ill.; Keithsburg, Ill.; Keokuk, Iowa; Lyons, Iowa; Quincy, Ill.; Rock Island, Ill.; Sabula, Iowa; Savanna.

¹ Denotes reduction.

Ill.; West Keithsburg, Iowa; West Quincy, Mo.; apply on shipments governed by classification governing through rates, as follows:

[Rates in cents per 100 pounds.]

Classes and commodities.	Illinois classifi- cation. ¹	Western classifi- cation. ²	Official classifi- cation. ³
First. Second	4 5 4 5	4.5 4.5	4 1
Third Third Subject to rule 28.	4.6	4.5	
Fourth. 126 per cent of fourth.	- 44	44	
Fifth. 90 per cent of fifth. 81xth or A	3	3 3	•
Any percentage of sixth. Beventh or B Eighth or C	3 2	3 2	
Ninth or D. Tenth or E. All articles shown as taking fruit or vegetable distance tariff rates, in car-	13	iş	
loads. All articles shown as taking grain or wheat distance tariff rates in carloads. All articles shown as taking lumber distance tariff rates or a percentage less	3 2		
than lumber distance tariff rates, in carloads	2 1 1 1		
Grain products: also live stock feed, less carloads, in lots of 2,000 pounds or over, shown as taking 30 per cent higher than wheat or grain distance tartiff rates.	3		

Maximum less than carload charge.

The charge for a less than carload shipment will not be greater than the minimum carload charge for the same kind of freight.

Commodities.	Rates in cents per 100 pounds
Cotton, c. 1.	4
Coal and coke, c. l	1
Coal and coke, c. l pressed meats and packing-house products, c. l flour, i. c. l., in lots of 2,000 pounds or over	1 2
flour, i. c. i., in lots of 2,000 pounds or over	1
Frain and grain products. c. l	
Hard and soft lumber, lath, and shingles, c. l	
Live stock, all kinds	. 90.
Ranway equipment, viz:	1 \$3.0
Caboose or way cars	
Locomotives and tenders (narrow-gauge)	² \$10.
Locomotives and tenders (standard gauge)	2 \$15.
Passenger and sleeping coaches.	
Baggage, mail, or express cars.	1 84.
lalt, cement, plaster, and stucco, c. l.	
oda, nitrate of, c. l. (destined to Ashburn, Mo., or Mooar, Iowa)	1
Ore (silver, lead, antimony, or copper), base bullion, copper residue, and copper matte, pig or ingot, spelter, and lead, c. l.	

¹ Rates are governed, except as otherwise provided herein, by the Illinois classification No. 10-A, W. H. Hosmer's I. C. C. No. A-266, Ind. R. C. A-15, supplements thereto and reissues thereof, and by the exceptions thereto as shown in Circular No. 1-H, W. H. Hosmer's I. C. C. No. A-275, supplements thereto and reissues thereof.

² Rates are governed, except as otherwise provided herein, by the western classification No. 50, F. J. Hosmann's I. C. C. No. 8, supplements thereto and reissues thereof, and by exceptions to said classification as shown in W. T. L. Circular No. 1-H, W. H. Hosmer's I. C. C. No. A-275, supplements thereto and reissues thereof.

³ Rates are governed, except as otherwise provided herein, by the official classification No. 38, F. S. Holbrook's I. C. C.-O. C. No. 38, supplements thereto and reissues thereof, and by exceptions to said classification as shown in freight tarif No. 130-E, Eugene Morris' I. C. C. No. 399, W. H. Hosmer's I. C. C. No. A-310, supplements thereto and reissues thereof.

⁴ Minimum charge to be made of not less than 5 cents per shipment.

STATEMENT BY MR. J. H. COLE, OF KEOKUK.

The CHAIRMAN. What is your name?

Mr. Cole. John H. Cole.

The CHAIRMAN. Where do you live?

Mr. Cole. At Keokuk, Iowa.

The CHAIRMAN. What is your occupation?

Mr. Cole. I am superintendent of the Keokuk & Hamilton Bridge Co.

The CHAIRMAN. You wish to make some statements, Mr. Cole?

Mr. Cole. Yes, sir. I wish to say that Mr. Joy has made some statements here which I think are quite misleading. No doubt this is because of the fact that some wicked railroad man has filled him up with information which is as far from the truth as any statements I might make would be as to the character of the ingredients which go into the proprietary medicinces which Mr. Joy manufactures.

In the first place, the Keokuk & Hamilton Bridge Co. has no voice in fixing the tolls across the bridge. The highway tolls are fixed by ordinances of the city of Keokuk and by the boards of supervisors of Hancock County, Ill. As a result of this there is no bridge across the Mississippi River where the highway tolls are as low as they are over our bridge. I have known, for instance, of a man and his wife driving across the Keokuk and Hamilton Bridge with their two-horse wagon for a charge of 25 cents, and a dozen or more people would also be piled on the wagon without any additional charge for them. At the Fort Madison Bridge, 25 miles above us, the man and his wife would be carried for the toll, and then for all other persons there would be an additional charge.

Mr. Joy has complained to you of some delay in the use of our bridge. This is caused by the fact that the bridge is a combination railroad and highway bridge, with a single railroad track in the center, and the bridge is not wide enough for the teams to pass the trains on the sides, and this would be a dangerous practice, even if it were possible. So that we are sometimes compelled to hold teams for a few minutes when they would be going against a railroad train coming from the opposite direction. Mr. Joy has come down occasionally in his automobile and had to wait as others may have to do on account of an approaching train, but if there is a few minutes

of leeway the gate is opened and Mr. Joy is allowed to go by.

Now, as to the railroad tolls: These are fixed by the railroads which use the bridges between Louisiana, Missouri, and Dubuque, Iowa, in the Western Trunk Line tariff No. 65, I. C. C., 162, a copy of which is attached to my testimony and marked "Exhibit A." It would make no difference to the shipper whether we charge the railroads one price or another; or, indeed, whether we carried their loads over free. The shipper would still pay the price fixed by the tariff, which, as I have stated, is by agreement, maintained at all these various river crossings.

Mr. Hamlin. Are you in combination with the railroads?

Mr. Cole. We have nothing to do with them.

The CHAIRMAN. That agreement with the railroads does not go

to the extent of absorbing the tolls?

Mr. Cole. No. sir. For instance, the rate on anthracite coal from Buffalo to Hamilton is \$2.79 per ton. If that coal is carried on into

Keokuk under this tariff No. 65, 30 cents per ton is added for hauling it across our bridge, and the public pays that.

Mr. HAMLIN. Why can not your company fix the charge that is

made on that ton of coal?

Mr. Cole. Simply because they will not accept it. It is to the interest of the railroads to maintain high tolls. When the Wabash railroad brings coal into Keokuk they deduct that 30 cents per ton before they prorate with the other roads.

Mr. Covington. What is the difference in the rates between Hamil-

ton and Keokuk?

Mr. Cole. The difference is 30 cents per ton on anthracite coal.
Mr. Covington. Do you mean that you get \$1 per ton for allowing that haul across your bridge?

Mr. Cole. No, sir; I do not.

Mr. Covington. How much do you get?

Mr. Cole. We ask 15 cents and they charge the public 30 cents per ton, and want to allow us 12½ cents. The bridge company is not allowed to fix the toll on a solitary commodity. As stated before, the highway tolls are fixed by the ordinances of the city of Keokuk; and the railway tolls by agreement among the railroads through Mr. Hosmer, their agent, issuing the Western Trunk Line tariff No. 65, and the bridge company has nothing to do as to that agreement and is not consulted as to its terms.

Mr. Hamilton. These bridges span the Mississippi River. You say the railroads have some sort of authority by which they make an arbitrary charge of 30 cents per ton. How are they able to fix the

toll?

Mr. Cole. In the same way the railroads do a thousand other

mi.

The CHAIRMAN. You say it is done by agreement with the other railroads?

Mr. Cole. Yes, sir; all the railroads that cross the Mississippi—that is between Louisiana, Mo., and Dubuque, Iowa.

Mr. Cullop. Have you ever appealed to the Interstate Commerce Commission?

Mr. Cole. Yes, sir; and they have refused to have anything to do with us, because they said we were not common carriers.

Mr. Cullop. Have you ever applied to the courts?

Mr. Cole. Well, suppose you and I disagreed about the price of a hat. I could not apply to the courts.

Mr. E. W. MARTIN. I suppose the shippers could make a case for

vou.

Mr. Broussard. Has not that regulation, tariff 65, been submitted to the Interstate Commerce Commission and received its approval?

Mr. Cole. Without a doubt.

Mr. Stevens. What is the gist of regulation 65?

Mr. Cole. It is about like this: On every single commodity handled by the railroads there is an agreement in regard to it. For instance, the rate on sugar is fixed at 3 cents per hundred pounds.

Mr. Hamilton. With special reference to the Mississippi River?

Mr. Cole. Yes, sir.

Mr. Stevens. Has anybody gone to the Secretary of War, the only authority who can settle it?

Mr. Cole. The consumer is interested in that.

Mr. Stevens. Is it your business to go to the Secretary of War?

Mr. Cole. No, sir.
Mr. Stevens. Yes, sir; it is. The other acts fixing tolls all come under the authority of the Secretary of War.

Mr. GILMAN. That was after our bridge was built.

The CHAIRMAN. The Interstate Commerce Commission has certainly not knowingly given its approval to this combination.

Mr. Cole. I see their stamp on this tariff, "I. C. C. 162."

Mr. Sims. Let me understand this. You say the railroad companies charge 30 cents per ton for taking coal across your bridge and

that they pay you only 12½ cents?

Mr. Cole. Yes, sir; on anthracite coal only, for bringing it from Hamilton, Ill., to Keokuk, Iowa, they travel over 3,000 feet of their own track and then 1,200 feet more in delivering it to the bridge, and then across the bridge, which is 2,200 feet, and for that service they charge 30 cents per ton for this haul of anthracite coal, and then allow us 12½ cents per ton as our share.

Mr. Esch. The public is vitally interested in the amount of this

charge.

Mr. Cole. I think you are right there.

Mr. Hamilton. Suppose this company, which has been incorporated, should succeed in getting the privilege of constructing a railroad across this dam, and suppose this other railroad should get the privilege of constructing a railroad down below your bridge, what is to prevent every one of these companies from fixing exactly the same rate for carrying a ton of coal across the river? What relief would the consumer get?

Mr. Cole. None whatever.

The CHAIRMAN. Mr. McKinney, I understand there is no opposi-

tion to your project.

Mr. Cole. We are raising none. But Mr. Marsh wants to be heard. I would say that these people do not want to build a bridge at all. They only want the sanction to lease and operate a bridge. The bridge they are building to-day they are building without warrant of law, and the bill that Mr. Joy presents is simply to allow a company to be formed to lease and operate a bridge that has already been built.

Mr. Stevens. If we should break up that combination the people

would profit by competition in bridges?

Mr. Cole. Yes, sir. The people of Keokuk will fall down on their knees to you if you take off those tolls.

The CHAIRMAN. Congress never consented to that.

Mr. Cole. I am simply telling you what has happened.
The Chairman. We will hear from the Attorney General on your testimony. We will refer your testimony to him.

Mr. Cole. All right; I will be glad to have you do so. The whole thing has been engendered by a railroad company that wants to eat our head off. Our bridge is only 1,500 feet below the dam, and then if another bridge is allowed to be built below us we will certainly have plenty of bridges at Keokuk.

Mr. Esch. As to foot passengers and wagons, you control your own

rates?

Mr. Cole. No, sir; the rates are fixed by legal authority.

Mr. Esch. Then there could be no complaint as to this charge for foot passengers?

Mr. Cole. No, sir; if there had been we would have heard of it.

Mr. Hamlin. If a man is going to cross on the railroad train, how

much do you get out of the railroad fare?

Mr. Cole. We get 18 cents out of his 25 cents. The railroads in Illinois only charge 2 cents a mile. We are willing to allow them 7 cents for hauling a passenger about a mile and a half and when using about 3,000 feet of their own track. Mr. Joy has told you that the business of Keokuk is handicapped by our bridge through its lack of

capacity for not taking as heavy loads as might be offered.

Now, I wish to say to you right here that in 25 years there has never been a carload of stuff offered to us that was refused on that account. As a matter of fact, we know nothing about the loading of these cars except where there is an open car and we see that it is loaded with coal or lumber or something of that character in an open car. The weights of all stuff are returned to us perhaps two months after the car has passed over the bridge. All this talk about the inability of the bridge to carry heavy loads arose out of the fact that some time ago the Toledo, Peoria & Western Railway Co. put on some very heavy engines that taxed the capacity of their own bridges and culverts. Some one in the superintendent's office at Peoria wrote me a letter asking me if I would permit the passing over our bridge of these extra heavy engines. I submitted the matter to the Keystone Bridge Co., who built the bridge, and they advised me that I should not allow these extra heavy engines on the bridge, because as this company was doing so little business it did not seem advisable to take any chances in that way. It has happened that the toll they pay us for passengers in a month amounts to more than they paid us for freight, their trains usually being from two to four cars of coal and a car or two of some other commodity, which is handled across the bridge by their switch engine, and which they also use in their business between Warsaw and Hamilton and in the yards at Hamilton.

Mr. Armstrong, who is the president of the Toledo, Peoria & Western Railroad, said to me at one time "that if some damn fool in the office of the superintendent had not written me that letter and thus put me on record we would have gone on with the business, as the bridge was able to carry any locomotive they used, and that no such

question would have arisen in this case."

In Mr. Joy's statement he calls attention to the fact that if the bridge is built for which his bill asks but one railroad will use it, the other railroads being tied up with the present bridge company. The railroad to which he refers—the Wabash—can not possibly bring to Hamilton, Ill., over their own tracks from Bluffs, Ill., and over their bridge at Meredosia, Ill., any loads or engines that will at all

tax the capacity of our bridge.

He also states that no provision is in his bill for handling highway traffic. So that what you are asked to do is to legalize an undertaking which assumes authority heretofore held by Congress in granting the right to build this bridge across the Mississippi River, the bridge for which they ask a concession being simply an additional concession by the War Department to the Mississippi River Power Co. to extend from the west end of the dam a bridge to the Iowa shore for profit as an accessory to the dam, and his bill hopes to legalize this structure

and make use of it as a crossing for railroads, and, according to his statement, of one railroad only.

The hearing was further continued by statements from Mr. Mc-Kinney, Representative in Congress from Illinois.

Mr. McKinney. I only expect to occupy a few minutes. During the last few years I have made a number of visits to Keokuk, having a great interest in that enterprise there, the construction of the dam. I was there last fall just before coming down to Washington, and was informed then by several citizens of Keokuk and by a gentleman living in Hamilton, that the power company which has constructed the dam was expecting to ask permission to use the dam as a railroad bridge. When they talked the matter over with me, I told them that so far as I was concerned, I had no objection to that plan, and that in fact I was favorable to it, provided there were no engineering or navigation difficulties encountered. When the matter was under consideration, I was informed that it was a possibility that the use of the top of the dam for the transportation of railroad traffic might lead to a final disintegration of the structure and jeopardize the dam. I was not an engineer and I was not able to form any good judgment as to that.

The CHAIRMAN. Do you remember any precedent for the Government permitting the combination of those two projects in one by different parties?

Mr. McKinney. I do not remember any such precedent, but that does not go to show that there was not such precedent at that time.

AFTER RECESS.

The committee reconvened at 3 p. m.

STATEMENT OF R. O. MARSH, PRESIDENT OF THE HAMILTON, WARSAW & KEOKUK BRIDGE CO., WARSAW, ILL.

The CHAIRMAN. Mr. Marsh, please give your name to the stenographer.

Mr. Marsh. R. O. Marsh, president of the Hamilton, Warsaw & Keokuk Bridge Co., and representative of the Upper Mississippi River Improvement Association, member of the legislative committee for Illinois.

Mr. Chairman and members, I have a number of points which will, no doubt, meet with some opposition, and in order to be sure that my statements will not be misinterpreted, I have put into writing the principal things which I wish to present before this committee, and with your leave I shall read them, in order that I may not overlook any of the points that may come up. There is one point I wish to make clear at first. Some of the gentlemen representing the Inter-City Bridge Co. apparently showed some apprehension when the gentleman representing the Carnegie interests spoke referring to me, and they seemed to have some idea that I was in favor of the Carnegie bridge and enlisted in their service. That is not so. I am here in the interest of our own bridge bill.

The CHAIRMAN. What bridge is that?

Mr. Marsh. It is to be about 2 miles below the dam.

The CHAIRMAN. That is the one that they said that you would not get money enough to build?

Mr. Marsh. Yes, sir. [Reading:]

Members of the Committee on Interstate and Foreign Commerce,

House of Representatives,

GENTLEMEN: I am appearing before this committee to advocate passage of House bill No. 26559, granting to the Hamilton, Warsaw & Keokuk Bridge Co. a franchise to build a bridge across the Mississippi River near the mouth of the Des Moines River. The purpose of our company is primarily to build this bridge for the use of the Baltimore & Ohio and Santa Fe Railroads, neither of which now enter this territory but both of which are contemplating doing so. I have already addressed a separate communication to each member of this committee, informing them of our attitude in this case, and particularly our intention that this bridge shall be owned and operated directly by the railroads as a part of the railroad right of way, and that no extra toll shall be charged for crossing this bridge either for passengers or freight service, but that such rates across this bridge shall be fixed merely upon the usual mileage basis. In this respect we are contending for a principle that is not only advantageous in the long run to the railroads themselves, but is of great importance to the shipping population on both sides of the river.

Mr. Hamlin. You do not contemplate providing for foot pas-

sengers and wagons?
Mr. Marsh. Yes; and in fact we do contemplate charging a toll for foot passengers or for wagons, for the simple reason that the money to build this bridge, if it is built, will be entirely furnished by the Baltimore & Ohio and the Sante Fe or other railroads. They will consider it as a part of their right of way. But for that portion of additional expense necessary to provide highway facilities, neither community on either side of the river contributes toward that. feel that we should have the same right as other bridges to charge a reasonable rate on teams and foot passengers, sufficient to maintain the drawbridge. We do not contemplate a free bridge for foot passengers nor for vehicles, but we do contemplate a free bridge for passenger and freight service on the trains. [Reading:]

We contend that a railroad bridge over any stream, large or small, should be owned and operated directly by the railroads using such bridge, subject, of course, to the usual Government regulations. We also contend that wherever the right, exclusive or otherwise, to build a railroad bridge over a stream is given to a private corporation which derives profits therefrom by charging toll of the railroads, who in turn levy this toll upon the shipper, it is an unjust and unnecessary burden upon the shipping public.

In order to make our position entirely clear, we now amend our original bill, clearly stipulating that no railroads using said bridge shall make any charge whatsoever as bridge toll, either for passengers or freight, but that charges over this bridge shall be regulated merely on the usual basis. In taking up this bridge matter with the army engineers, I find that the only real objection in their minds is that a new bridge at this point is not necessary, as the existing bridge, about 2 miles farther up the river, is apparently sufficient to handle the traffic in that vicinity. This objection I can only answer by saying that so far as existing conditions and existing traffic are concerned, no new bridge whatever is necessary. Our bridge does not contemplate taking any of the existing traffic, but contemplates the bringing in of additional rallroads which can not be satisfactorily accommodated either by the present bridge or by the proposed new bridge across the dam still farther to the north. A study of the accompanying map will illustrate this point. In other words, this is merely an inducement to two new railroads to enter this field, a consummation which will be greatly to the benefit of all concerned on both sides of the river. It will readily be seen that in case these two new railroads, the Baltimore & Ohio and the Santa Fe, should not enter this territory that our proposed bridge would not be built, and it could in nowise enter into injurious competition with other bridge projects farther to the north.

Now, if it is stipulated in the bill granting us this franchise that no extra toll for freight or passenger train service shall be charged, and if, as these gentlemen say, the railroads, by agreement, charge toll under a different name, there certainly must be a legal recourse in this country to hold them down to no toll. If it is stipulated in the original bill that they shall charge no extra toll there should be no difficulty about it. We are doing all we can to secure a bridge free from extra toll.

The CHAIRMAN. Whom do you represent?

Mr. Marsh. I am representing the Hamilton, Warsaw & Keokuk Bridge Co.

The CHAIRMAN. It is rather a unique thing for a railroad com-

pany to come in and ask for a free bridge.

Mr. Marsh. No, sir. I will explain on this map. The Santa Fe Railroad comes down here, a distance of about 10 miles. The Baltimore & Ohio is down at Beardstown, Ill. Our bridge comes down at this point. Those two railroads are now considering a proposition which I have put up before them of coming into this industrial-development section and forming a connection, the Santa Fe with the Baltimore & Ohio shipping east, and the Baltimore & Ohio with the Santa Fe shipping west, and they want their own bridge when they come in, not subject to the restrictions and the trouble of running clear up the water front, practically controlled by the Burlington Railroad, and going over this bridge [indicating] and having to come down this route here [indicating]. As a matter of fact, they would have to fight their way all the way down here [indicating] to reach the other bridges, which would cost them as much as building a new bridge; and when they have the new bridge they can carry their own freight without outside restrictions.

Mr. Hamilton. Do you say that the capital is ready to build this? Mr. Marsh. No, sir; the proposition is now under consideration by both railroads. The Baltimore & Ohio people are considering whether they will come into this proposition, pending the result of this bridge act.

Mr. HAMILTON. Did either of these companies originate the idea

of this bridge at this point?

Mr. Marsh. Well, as a matter of fact, they have both contemplated it for a great many years, but they have not yet come in because it did not seem heretofore, from a traffic point of view, that it would pay. However, with the prospect of increased traffic in the future it is highly probable that there will be a good field for them, and this is merely an incentive for them to come into this proposition if they do want to come in. Unless the Baltimore & Ohio and the Santa Fe can build this bridge the bridge in all probability will not be built. We do not compete with the other bridge. We do not compete with the dam, because we would not get much of the traffic that they would get in any case, and they will not get the traffic of the Baltimore & Ohio and the Santa Fe. At least, that is the way I understand it. They, the railroads, will want their own bridge, so that there is no danger of competition.

The CHAIRMAN. What answer have you to the proposition here

that your company will never be able to build the bridge?

Mr. Marsh. Well, if the company is never able to build the bridge there will be no harm to anybody.

The CHAIRMAN. What is the truth about that?

Mr. Marsh. I am doing work and making reports for both the railroads concerned.

The CHAIRMAN. What is the financial prospect?

Mr. Marsh. I think it is very good. As a matter of fact, we have a letter from the Baltimore & Ohio people stating that they are awaiting action on our bridge bill.

Mr. Stevens. What is the size of the spans in the river?
Mr. Marsh. We have a temporary design which was before the Army engineers. We have been quite willing to comply with their demands, even to building a 300-foot clear lift draw, while the largest draw above St. Louis is 175 feet. Now, we have signified our willingness to comply with all their demands and put up any kind of a bridge they wish.

Mr. Hamlin. Who is the Inter-City Bridge Co. ?

Mr. Marsh. I am coming to that.

Mr. Stevens. Have you consulted the navigation interests?

Mr. Marsh. I am coming to that. I will take that up. [Reading:]

However, this entire bridge question in the vicinity of Keokuk is so involved that I think it only just to this committee that it should be made aware of all the facts connected therewith. The present bridge company, known as the Keokuk & Hamilton Bridge Co., has apparently in the past been unsatisfactory both through its inability to accommodate heavy modern locomotives, and more particularly as to reported exorbitant rates of toll charge thereon. To offset the disadvantages of this present bridge the Mississippi River Power Co. through a subsidiary company known as the Intercity Bridge Co., whose representatives are present at this meeting, have introduced a bill asking the right of using the power dam as a bridge, extending it by a steel structure across the forebay at the head of the new Government locks in order to join with the Iowa shore. I think that these gentlemen here present will not deny that they are merely a temporary holding company intending to turn over their franchise. if secured, to the Mississippi River Power Co., or a subsidiary controlled by them, and ask the right of charging toll for all transportation over said dam and bridge extension. We have no objection to the passage of their bill, provided it is judged on its merits, but we do object and oppose most strenuously the methods which have been attempted by this company to put through their bridge in defiance of the ordinary procedure in such cases. There is very grave opposition to the project of using the dam as a bridge, first, because of its danger and obstruction to navigation; second, because of the unwise control it would give said power company in its domination over the entire industrial development of that section of the Middle West. This company has shown a disposition to put through its project by misrepresentation and subterfuge in defiance of the ordinary procedure in such cases.

Construction work has already commenced on their project, concrete piers

are being laid, and steel has already been ordered, I am informed, before they have secured the franchise from Congress. This has been done in the following way: The power company, which is operating under a franchise from Congress giving them the right to dam the Mississippi River and derive electric power therefrom, has secured the approval of the Army engineers for the construction of this bridge on the ground that it is accessory to the construction and operation of the said power plant. This is entirely a misrepresentation and subterfuge. Their bridge will not be completed until the power plant and dam are completed; it has never been contemplated in any of the designs or plans of the power company until they decided to use the dam as a toll bridge, and for no other purpose than to be used as a toll bridge. However, once they have accomplished the construction of this bridge across the forebay on the subterfuge that it is an accessory to the construction and operation of the power plant, they then conceive that there can be no further objection to their using it as a toll bridge because it will already have been completed and to use

it would be no further obstruction to navigation. To me it is inconceivable that the Army engineers, knowingly or unknowingly, could have given their consent to such a scheme, but I believe that their action in this matter makes it necessary to explain more fully their relations toward the power company, showing what I consider the grave danger to the public wellfare of the acquiescence of the Army engineers in the desires and wishes of the said power company.

The Mississippi River Power Co. is acting under a franchise passed by this Congress granting them the right to put a dam across the Mississippi River and utilize the electric power available therefrom. The original bill for this franchise was introduced by my father in Congress and passed February 9. 1905. It was argued and believed that the creation of this dam would be a great benefit both to the public and to the Government in that by forming a deep pool of water above the dam, it would greatly improve the navigation over the rapids at that point, and would replace the existing canal with three locks by a more modern single lock, and it was on the ground of this benefit to navigation, as well as to the general public, that this franchise was passed by Congress. Here again, however, the power company did not content itself with limiting its activities within its original rights. It was found that during periods of low water there was not sufficient power available in the river to maintain this power plant at its full capacity of 200,000 horsepower. During periods of low water, such as have occurred in the past two preceding summers, there was approximately but 21,000 cubic feet of water per second in the river, and this with the head of 39 feet available as a result of the dam will generate only about 80,000 horsepower. Mr. Cooper, who bought out the rights of the original Keokuk & Hamilton Water Power Co., realized that the lack of sufficient water during low-water periods was a great drawback in the financing and promoting of this enterprise. He applied to the Army engineers and Gen. MacKenzie, who was Chief of Engineers, stating, as I have since been told by Maj. Keller, that he could finance the power plant provided he were given the right of storage of water during the night hours, and asked permission from the Army engineers to entirely shut off the flow of water past the dam during the night hours in time of low water. As this would have entirely prevented navigation for many miles below the dam for many hours each night, his request was refused. He then modified his original request, again representing that with the right of storage during the night he could finance the project, and without it, it would fall through.

As a matter of fact, he had practically spent this private fortune in the promoting of this project, and the Army engineers, I am told and believe. more through admiration for the pluck and energy of Mr. Cooper and in the belief that he could not put it through in any case, granted him the right in a signed agreement to store the water above the dam, as follows: Between the hours of sunset and sunrise, for the first hour the water flowing past the dam may be reduced to 15,000 cubic feet per second, for the second hour to 10,000 cubic feet per second, and during the remainder of the night until two hours before daybreak to only 5,000 cubic feet per second, provided that during the hours of daylight the same amount of water that had been stored at night should be released in addition to the normal flow. This agreement has been kept practically secret ever since. As far as I am aware, it has never been made public or published in this country. It has been unknown to the members of the Rivers and Harbors Committee, I believe, as well as to the Upper Mississippi River Improvement Association and to all those interested in the navigation of the Mississippi River. The effect of this storage is very apparent when you consider that in times of lowest natural flow there is 21,000 cubic feet of water in the river at this point At such times it is very difficult for the ordinary river boats to navigate on account of the shallowness of the river, and in fact many of the larger boats have to tie up during these low-water periods. Now. when the power company every night at will shuts off the flow of water past the dam for six or more hours at least to less than one-fourth the extreme natural flow, the effect will only be the entire suspension of navigation during those hours of the night; furthermore, when the first flow of water is turned on in the morning this will not catch up with the low-water swale preceding it for many miles below the dam and will be detrimental not only to local navigation but to all through-river navigation from St. Louis to St. Paul. In fact so monstrous and so appalling will be the effects of this storage if permitted that rivermen, officials of the Upper Mississippi River Improvement Association and others interested, could not at first believe that such an agreement did

exist, and in fact, if it had not been by accident, the knowledge of this storage agreement would not yet be known by them.

I first discovered the terms of this agreement when they were published in the London Times about two years ago when the power company floated 15 millions of bonds in London. It was necessary, in order to secure this bond issue, that this agreement with the Army engineers should be known to the foreign investors. When I spoke of this to different men interested in the internal waterways of this country, they refused to believe that such an agreement existed. A few weeks ago I went to Maj. Kellar's office, in charge of the Army engineers at Rock Island, Ill., and there saw some of the original drafts of this agreement, which were corroborated by Maj. Kellar. When I asked him why this had been kept secret from the public and those interested in river navigation, he replied, as I remember it, that the engineers had made no mention of it on the outside for the reason that they had not heretofore been asked about it, but that they had no right to keep such an agreement secret; however, he could realize that the power company had not made this agreement public, because of the opposition it would create. I mention this fact merely as an incident illustrating the influence the power company has exerted over the Army engineers in other matter besides this bridge matter, which influence is decidedly detrimental to the public welfare. That there will be a protest against this right of storage from the steamboat men, the different towns along the Mississippi River, and from the Upper Mississippi River Improvement Association when they fully comprehend what it means, there can be no doubt. I realize that in making these assertions I am condemning the attitude of the Army engineers, but I can not help but feel that their attitude deserves and demands condemnation.

Still one other instance which illustrates the undue influence of the power company with the Army engineers. Owing to the construction of the dam and the new Government lock, it was necessary to excavate a new steamboat channel in the river bottom from the entrance to the new lock to the outer draw of the bridge downstream. This involved the excavation of many thousands of cubic yards of rock under water, requiring considerable special apparatus and much expense, which, however, was clearly stipulated to be borne by the power company. However, this work was actually done by the Army engineers, using the Government equipment for the same, I am told, on a contract basis with the power company whereby they received a certain payment for the work. Several years ago the levee protecting some 30,000 acres of lowland below the city of Warsaw, Ill., was seriously threatened by a high flood. The commissioners of the levy district at that time petitioned the Army engineers to use Government equipment near by and available for the strengthening and repairing of this levee during this threatened period, offering to pay therefor whatever the Government engineers thought proper. This petition was refused, on the ground, I am told by the commissioners, that the Army engineers were not authorized to use the Government equipment for doing work of a private nature, yet, what they refused to do in time of emergency, involving great expense to a mass of poor people, they have done for the power company.

My point in going into these details is twofold: First, to bring out that the

My point in going into these details is twofold: First, to bring out that the operations of the power company unless restricted by Government control will be very detrimental to the navigation of the river instead of a benefit as contemplated when the franchise was issued to them, also to point out that in the past the Army engineers have been so apparently dominated by the influence of this company as to disregard the public welfare. There is another point which I believe should be brought out at this hearing. By virtue of their congressional franchise and by virtue of their right of eminent domain to condemn lands flooded above the dam the power company is clearly a public-service corporation. The power that they generate should be available to individuals and cities near by at proper rates. I have been very much interested in this question through my endeavors to develop an industrial section for factory sites near the dam. I have found, in common with others, particularly, I may add, the Chamber of Commerce of the city of Quincy, that the power company has refused to grant rates for power to any community or any subsidiary company which was not controlled by them. The power company has, through its subsidiary and affiliated companies, secured the public utilities, electric light and street railways, of St. Louis for a period of 99 years. Through its agents, often acting under independent names, they have already negotiated for, and are negotiating for, the public utilities of practically every town

of any importance along the river from St. Louis to Burlington, westward into Missouri and Iowa, and eastward into Illinois. Their aim is—and I make this charge knowing the seriousness of it—to secure control and monopoly of practically all the public utilities as well as industrial development in that section of the country, and they have shown an unwillingness to make rates to outside companies not controlled by themselves. By so doing they are directly violating the public service corporation act and the Sherman antitrust law, and are building up a sphere of influence which in the future will have its drawbacks and aftermath the same as has resulted from this disposition on the part of

many other large corporations.

I believe you gentlemen will find that the only remedy for this state of affairs will be to place the control of the rates of the power company in the hands of the Interstate Commerce Commission where they should be. To give this one company, with the power of securing such control over the public utilities and industrial development of this large section of country, a franchise which will largely bring the transportation of that district further into their control is, in my opinion, a very unwise and near-sighted thing to do. I am opposed to the power company operating their dam as a bridge because it is outside of their legitimate sphere and contemplates a right never conceded to them in the original franchise, a franchise which, by the way, is conceded to be the most liberal water franchise ever granted in the United States to a private corporation. It is the old story of giving a corporation an inch and they take an ell.

If the present bridge company will agree to rebuild its bridge according to

If the present bridge company will agree to rebuild its bridge according to modern specifications and subject to the new bridge regulations, putting the supervision of rates in the hands of the Secretary of War, there is no single reason for or benefit to be derived from the use of the dam as a bridge, while on the other hand there are many objections to using the dam as a bridge.

As for our own proposition, I repeat we offer a free crossing of the river without tolls, which neither of the other companies even contemplates, and we cater entirely to a new railroad service at present not entering this field and therefore can not be considered as competitors in any sense. We merely ask that these bills be treated on their intrinsic merits, but we protest against the misrepresentation and subterfuge which has been attempted by the power company.

The objection of the Army engineers is that there is not now sufficient traffic to warrant the building of our bridge. To that objection I can only say that it is perfectly true. So far as the present traffic is concerned, there is no need for another bridge whatever. We do not come into this bridge field asking for traffic. We are bringing new traffic that will be of inestimable value to the community.

The CHAIRMAN. Whose opinion is that you quoted from there a moment ago? Is that your own text or the opinion of somebody else?

Mr. Marsh. This whole thing is my own text. The Army engineers have raised this objection, which was brought forward by Maj. Keller, that they did not consider our bridge necessary, because there was not sufficient traffic to warrant it at this point.

The CHAIRMAN. Do you have in view the idea of avoiding unneces-

sary obstructions to vehicles?

Mr. Marsh. Yes, sir.

Mr. Covington. Did they also consider the use of the dam for an additional bridge?

Mr. Marsh. Yes, sir.

Mr. Stevens. That is not quite their business. It is our business to see what objection navigation interests might have to the construction of this bridge. Now, have you had any communication with the navigation interests on the upper river?

Mr. Marsh. I have had communication with President Wilkinson, the president of the Mississippi River Improvement Association, with Capt. Blair, who runs the local boats, and Capt. Streckfus, who runs

the through boats, and they are intensely opposed to the present plans to use the dam as a bridge. They did not know a thing about it until four or five days ago, when at the request of President Wilkinson, of the Upper Mississippi River Commission, and with a letter of introduction from him I went to the steamboat men and informed them of the different bridge plans. Mr. Wilkinson is very much opposed to the action of the power company. He stated that the navigation interests have not been notified. Neither Capt. Blair nor Capt. Streckfus was notified of this and knew nothing at all about it. The construction is now under way. They have been working on it, and it will be finished very soon.

Mr. Covington. What bridge is that?

Mr. Marsh. The bridge across the forebay joining the dam. They are not only putting in concrete now, but the steel plans have been ordered from the Scherzer-Rolling Lift Bridge Co., of Chicago.

Mr. E. W. MARTIN. Is the power used in that bridge used for its

own purposes?

Mr. Marsh. Their bridge has nothing to do with the development of power.

Mr. E. W. MARTIN. How about the great turbine wheels?

Mr. Marsh. They have nothing to do with the bridge.

Mr. HAMLIN. Who has placed all the contracts?

Mr. Marsh. Mr. Hugh L. Cooper, the chief engineer of the power company. The power company has already ordered material for the bridge in the name of the Mississippi River Power Co.

Mr. Covington. Who is the owner of that?

Mr. Marsh. Mr. Hugh L. Cooper, a famous engineer, I am informed, owns 25 per cent of the stock. I have pretty good inside information on the actual conditions there. The Stone-Webster people, of Boston, great electrical water power operators, own 25 per cent of the stock, and the other 50 per cent is owned largely by foreign stockholders, who took up most of the bonds which were issued in London, the first lump being \$15,000,000. The head of this great \$100,000,000 corporation in Boston, Mr. Stone, is president of this company, Mr. Hugh L. Cooper is vice president, with 25 per cent of the stock for his promoting services, and the stockholders and the other directors I do not know. Judge Logan, of Keokuk, is another, but is controlled by Stone & Webster and Mr. Cooper and outside stockholders. The Stone & Webster interests have a 10-year managing control of this work for this intangible Mississippi River Power Co., so that the men who will run this company are the Stone & Webster people as managers for the Mississippi River Power Co. Mr. Cooper is expecting to leave Keokuk and take up some other work somewhere else.

Mr. E. W. MARTIN. Your statement is that the representatives of the power company ordered this bridge. I understood your statement was that preparations are being made to put in concrete, etc.,

for pier work, and the steel is ordered for structural work?

Mr. Marsh. Yes, sir. Some of the concrete has already been laid

in the piers.

Mr. E. W. MARTIN. And that is done by representatives of the power company?

Mr. Marsh. Yes, sir; by Mr. Cooper. I will come to that.

Mr. Esch. By permission of the War Department.

The CHAIRMAN. You do not know what the terms of the agreement are between the two companies?

Mr. Marsh. I think Mr. Joy knows it.

Mr. Stevens. I want to make it clear of record what your relations

are with the navigation interests.

Mr. Marsh. Yes, sir. I represent the State of Illinois as a member of the Upper Mississippi River Improvement Association, being a member of the legislative committee.

The CHAIRMAN. What are the names of those two captains?

Mr. Marsh. Capt. Streckfus, who owns a straight line from St. Louis to St. Paul, and Capt. Blair, who owns a local line.

The CHAIRMAN. Here is a telegram from them signed by them

jointly.

Mr. Stevens. Have you received any telegrams from them?

The CHAIRMAN. I have a telegram from them now which says, "We oppose any action on that bridge proposition."

Mr. Marsh. They knew nothing of this question four or five days The whole thing had been approved by Maj. Keller, and the navigation interests did not have any notice, and did not know a blessed thing about it and did not have a chance. At the request of the president of the Upper Mississippi Improvement Association, who sent me to Capt. Blair and Capt. Streckfus, I informed them of this proposition to use the dam as a bridge, and they considered it dangerous. They knew nothing about it and they demanded a hearing, I understand it, because this morning I received a telegram saying that they had secured one. As a matter of fact, they should have been given that hearing before that thing was approved by the Army engineers. I have not a bit of objection to the proposition one way or the other if treated on its merits, but I do protest against running a thing through by subterfuge and misrepresentation. Those are strong words, and I would not use them unless I was able to bear them out.

The CHAIRMAN. The reason I ask you whether you knew anything about the connection between the parties, I want to know whether there is any chance of any railroad securing control of those power

companies.

Mr. Marsh. None whatever, in my opinion. The fact is that the Wabash Railroad, some months ago, got into communication with the local representatives of the power company and the Boston people, trying to get them to use the dam as a bridge. There has always been some idea that it would be used as a bridge and that idea has always been contradicted by the statement of Mr. Cooper that he was building a dam and not a bridge, and it was not going to be used as a bridge if he could help it. Then the idea seemed to grow in the minds of the power company people that to use the dam as a bridge meant considerable revenue to them, not only by bringing over outside freight but by taking their own transportation over. In addition to managing the power company the Stone-Webster people are buying up or own the public utilities on both sides of the river, including the electric trolley lines, and in practically every town they are negotiating with, from St. Louis to Burlington, they are getting control of the electric railroads on both sides of the river. It will be a great future benefit to them after their present contract expires with the

old bridge company not only to run their own cars over their own bridge, but to control all bridge transportation, and it is a revenue producer and it is a very good business move. All this I know as actual fact. When it was decided in Boston to use the new dam as a bridge it was decided that the proper way to get that permission was to make it appear that the power company really did not want to use the dam as a bridge; that they were opposed to it; and then they would get representatives of the towns on either side, Keokuk and Hamilton, to come forward and demand the permission and then the power company would be reluctant to disagree with them and would finally consent to the use of the dam as a bridge. The Intercity Bridge Co. is composed of the local representatives of the adjacent towns who are helping the power company carry forward its policies.

The Chairman. Organized as a necessary instrument to carry out

the project?

Mr. Marsh. Yes; as a necessary instrument to carry out the building of the bridge. As I say, an arrangement was made with the local Intercity Bridge Co. merely as a holding company, which will turn over their franchise to the power company who ordered the bridge. Now, if this dam is to be adjudged a bridge and the construction of the span across the fore bay goes through the ordinary routine of a bridge bill, I have no objection to it at all, but I do object when the thing is practically rammed through by subterfuge that it is a necessity and accessory to the dam and the power house for power purposes. It never was conceived of in the plans of the power company until they wished to get a bridge and then with the cooperation of the Army engineers they start construction on the pretext that it is an accessory to the water-power development and later come here and ask you for permission to use it as a bridge. In other words, they now ask you to make legal what they have already started illegally. Now, it makes little difference whether they are ever going to use it as a bridge or not. The thing is to give the navigation interests a chance to be heard. They have telegraphed to Chairman Adamson and they have telegraphed to me that they are opposed to it on the point of danger to navigation. Now, here is exactly the point that they brought out; the steamboat men took this view: The steamboat comes out into this lock, comes out into this fore bay [indicating on plan], the power house on the right-hand side through which during most of the year the entire Mississippi River will go. This dam will only be used as a spillway for this water. Now, when the original plans were drawn up the engineers insisted on putting the lock on a skew, so that the boats could work to this side and avoid the undertow or suction, and that made necessary an opening in the ice fender which was very close to the shore on the Iowa side. Now, when they came to construct the drawbridge the only way that they could get from the dam proper to the Iowa shore was by making a double "S" reverse curve coming along here [indicating], a circle coming around here [indicating] and joining the main track. From an engineering point of view it is a bad curve. I have never seen an engineer who has seen that curve who has not stopped and cussed it as the most nasty curve he ever saw. As a railroad engineer, I would say the whole thing is most repulsive to an engineer who has not some personal reason for approving it.

In order to make that draw opening they had to bring it out to about the middle of this space [indicating]; they have also brought that opening in the ice fender out to about the middle, so that the boom, instead of being near the shore, is considerably out from the shore. Capt. Streckfus and Capt. Blair have stated that in that congested area they have to go at very slow speed. They have to come in here in a water that is either stagnant or which has a current at right angles to their course, and that gives them a very bad roadway in which to steer. They say that on a bad night with a heavy storm it will be very nasty to pass through. Now, if they miss that [indicating], and are blown out here over toward the power house, there is going to be a great suction. There will be 20,000 to 60,000 cubic feet of water coming down there; Mississippi River boats are not very large. A boat gets in there [indicating], and it is helpless; in a very nasty location. They object to that. Now, I am not a navigator, but I believe that their objections are absolutely valid, and I think that before such a thing is built they should have a hearing, which, up to this time, has been denied them, and which would have been denied them but for the efforts of the Mississippi River Improvement Association.

Mr. HAMLIN. I understood from the testimony this morning that the intake of the turbines or the penstocks would be 12 feet below the surface of the water. Would that be sufficient to deviate the cur-

rent in the course of the river?

Mr. Marsh. No; I do not think so. It would be 8 feet below the surface of the basin. The height of the water in the forebay will be about 519 feet. The entire Mississippi River, under ordinary circumstances, will be going through there. All the water that you now have distributed over here [indicating], pretty near a mile, is apt to be concentrated over there [indicating], and there is going to be considerable cross currents.

Mr. Hamilton. I did not hear the whole of your statement, and therefore I did not hear why this bridge was not constructed on this

side of the forebay.

Mr. Marsh. For the reason that it has never been conceived that the dam would ever be used as a bridge. In fact, Mr. Cooper has said it would never be a bridge if he could help it. Now, as a matter of fact, this thing is already being built. The power house abuts above the dam upstream 50 or 60 feet. I do not know the exact dimension, but this [indicating] is drawn to approximately a scale. Up here [indicating] is the ice fender going up to the shore with great holes underneath the water surface to let the water in and prevent the ice from coming through. If it was ever anticipated that a bridge would be necessary that design would never have been made. There is no reason why that power house should have stopped there. This has merely been a case of patchwork fitted in at the last minute.

Mr. Hamlin. I understand that a bridge was not intended to be-

come a part of this structure originally.

Mr. Marsh No, sir.

Mr. Hamlin. That the bridge has been a second thought.

Mr. Marsh. The bridge has been a second thought, an after-thought.

Mr. Hamlin. And the dam as constructed would not permit the

extension of that bridge across the forebay?

Mr. Marsh. No, sir. The clear way to do it would be to tunnel through the power house. The only way to get around there now would be to take this nasty skew curve from here. I have seen Kansas City and Chicago engineers come there and they have just looked at it and simply cussed when they saw it. It is not only a nasty curve from a railroad standpoint, but also from a navigator's standpoint.

Mr. Hamlin. What is the danger of this reverse curve?

Mr. Marsh. A reverse curve is bad practice.

Mr. Hamlin. More dangerous than a straight curve?

Mr. Marsh. Yes, sir (indicating). Now, on a curve you elevate the outer rail. Where you come to the end of that curve and strike the tangent you can not drop the elevation of the outer rail all at You have to grade upon the tangent.

Mr. Hamlin. It is a letter "S," is it not?
Mr. Marsh. It is a letter "S," and it is prohibited by all railroads unless it is an absolute necessity, the rule being that no two curves should join each other.

Mr. HAMILTON. Do I understand that the engineers' office in the War Department has approved of the plan of construction of this

reverse curve?

Mr. Marsh. Yes, sir. I do not believe that the Army engineers here in Washington fully comprehended the matter. It was reported on by Maj. Keller at Rock Island. Maj. Keller should have given the navigation interests a hearing, and he did not give them a hearing, and he did not agree to a hearing until we brought pressure to bear on him. It has been attempted to rush this thing through now because the power company did not decide on it until the last minute. It is very cheap to put it in now, but if they wait until next spring there will be 50 feet of water there, and it will make a much greater expense. Now, as an actual fact, the desire of the power people was to rush this bill through last December, to have it reported by the Army engineers favorably, have no opposition to it, let it go to the House, and let it go through, but there was much opposition to this started by myself and others.

The CHAIRMAN. Is navigation going through there rendered more

dangerous by reason of the bridge being there?

Mr. Marsh. Decidedly so. The CHAIRMAN. Why?

Mr. Marsh. This was put on a skew, not parallel to the power

The CHAIRMAN. You heard the gentleman's statement this morn-

ing that this bridge was not anywhere near the lock?

Mr. Marsh. Well, gentlemen, I want to illustrate with these. These pictures show the different locations. One of these colored pictures is published by the power company.

The CHAIRMAN. Is the bridge near the power house?

Mr. Marsh. The bridge comes right at the upper end of the power

The CHAIRMAN. I meant the lock. Is the bridge located anywhere near the lock?

Mr. Marsh. Well, the bridge is quite a ways—about 1,600 feet that is, the upper end of the bridge.

Mr. E. W. MARTIN. Is that a bascule bridge?

Mr. Marsh. Yes, sir. The Chairman. They say it is 1,700 feet from the lock. What is the trouble that a boat can not square itself and hit ahead and get

through 175 feet?

Mr. Marsh. They have to run through this boom up here [indicating]. If the bridge is not here they will run through 300 feet in making the boom, and they can work over into the side here [indicating] and escape the bad effects of this draft. But it was necessary to put the draw here. They have had to change the opening in the ice fender here to bring the boats out here [indicating]. The points I am giving you have been brought out by Capts. Blair and Streckfus.

The CHAIRMAN. I suppose under proper salutary counsel the War

Department could require the bridge to be wider than 175 feet?

Mr. Marsh. The wider the better.

Mr. Hamlin. Have you any idea what it would cost to cut away a part of that power house, or to tunnel through it, so as to make that railroad bridge straight across there?

Mr. Marsh. Of course, I could not say. The fact is, the upper end

of the power house is designed for the machine shop, I think.

Mr. HAMLIN. You think it would be impossible for them to run that railroad bridge straight through?

Mr. Marsh. It would not be impossible. Just because they don't want to do it.

Mr. Hamlin. That is because they have been taking into considera-

tion the items of expense. Mr. Marsh. I do not know anything about that. I suppose it is

the disadvantage to their internal layout, turbines, etc.

The CHAIRMAN. I suppose the chief advantage commending this plan to the promoters is that in utilizing that dam they can also secure a bridge at smaller cost than in any other way?

Mr. Marsh. Yes, sir.

The CHAIRMAN. It would be more economical.

Mr. Marsh. It is a very cheap way to get a bridge. It is good

Mr. Hamilton. You spoke of trying to rush this thing through last year, and perhaps but for your opposition they would have gotten it?

Mr. Marsh. Yes, sir.

Mr. Hamilton. What reason have you for opposing it?

Mr. Marsh. In point of fact I do not oppose it if navigation agreed to it, but I do oppose it when they have not had a hearing. I say that if this thing is put through on its merits and the watermen are given a chance-

Mr. Stevens (interposing). Do you appear here as the special

representative of the navigation interests?

Mr. Marsh. I appear here at the suggestion of President Wilkinson, and a member of the Upper Mississippi River Improvement Association.

Mr. Hamlin. Did you call the attention of the War Department to

these questions?

Mr. Marsh. I attempted to do so for several hours yesterday, and they told me to put them in writing and an investigation would be made, and if it was found that this was an obstruction to navigation they could still call off the work.

Mr. Hamlin. Your idea is that it is dangerous to navigation because there is a constant flow of water?

Mr. Marsh. Yes, sir; and a too great volume of water going

through here.

Mr. Hamlin. If this bridge is now allowed to go through, does it

effect your opportunity to go down the river?

Mr. Marsh. It would if the Army engineers thought another bridge unnecessary. I have felt that their opposition to my bridge is that they do not think there is enough trade to warrant a new bridge, and that all bridges are obstructions to navigation.

Mr. Sims. If it does not obstruct navigation materially, is it not more a matter for the investors to determine than Congress or the

War Department?

Mr. Marsh. Yes, sir. Our bridge will not be built unless the two

railroads come in and build it.

Mr. Sims. But if the capitalists desire to invest in that way, it is only a matter for their discretion rather than for the guardianship for anyone else?

Mr. Marsh. Yes, sir; and that is the reason I was very much disappointed by the attitude of the engineers yesterday who were opposing my project.

Mr. STEVENS. Did they not base it on the ground that any bridge

is an obstruction to navigation?

Mr. Marsh. Yes, sir.

Mr. Stevens. That is reason enough?

Mr. Marsh. Yes, sir; if the bridge is really not necessary.

Mr. Stevens. That is also reason enough for us in considering the

Mr. Marsh. Oh, yes; of course. The Chairman. Is there any reason why these two navigators who sent us this telegram could not come here?

Mr. Marsh. Yes, sir. I telegraphed Capt. Blair. He did not

know of this until last Monday.

The CHAIRMAN. Is there any reason why they could not come here

and give us their reasons?

Mr. Marsh. Mrs. Blair telegraphed that Capt. Blair was sick in bed with the grip. Capt. Streckfus told me he was going down to St. Louis, and the telegram I got from him was that he was called to St. Louis on business and could not come.

The CHAIRMAN. What is Mrs. Blair's telegram?

Mr. Marsh. "Capt. Blair down with la grippe. Can not go to Washington." That is from Mrs. Blair.

The CHAIRMAN. Don't you feel that the very fact that these people have discovered a dirt-cheap way to combine both their water power and transportation facilities across the river might not in some way militate against the public in the matter of rates, or could not they give the public cheaper rates?

Mr. Marsh. I do not think it would have any effect on the rates.

Mr. Stevens. Could not we make it have some effect on the rates? Mr. Marsh. I say absolutely that there will never be satisfactory conditions existing among the consumers and the power companies until the rates are put under the jurisdiction of the Interstate Commerce Commission.

The CHAIRMAN. I am not talking about who does it. I asked you if it does not afford a reason why they should not be required to do it, to make them cheaper. If it costs less ought not they to sell it for less?

Mr. Marsh. As a matter of fact, the building of the bridge does

not have anything to do with the generation of power.

Mr. Hamlin. But it would have something to do with the transportation of power?

Mr. Marsh. It might have.

The CHAIRMAN. If, as you claim, it is all wadded up together in one concern, the lump cost of production being lessened, it would make the general average cheaper?

Mr. Marsh. It would, if you have any means of getting them

The CHAIRMAN (interposing). We have plenty of power. Mr. Marsh. There is plenty of opportunity to exercise it.

Mr. Hamlin. I want to ask you a question, which I am sure I have

asked you before, but whom do you represent in this matter?

Mr. Marsh. I have come here advocating a bridge as president of the Hamilton, Warsaw & Keokuk Bridge Co., which I told you was trying to secure this bridge in the hope-

The CHAIRMAN (interposing). We understand that part of it. Mr. Hamlin. You represent that company?

Mr. Marsh. Yes, sir; the Hamilton, Warsaw & Keokuk Bridge Co.

Mr. Hamlin. Is the bill you are talking about H. R. 26672?

Mr. Marsh. No, sir; that is the power company's bill, the preceding bill.

Mr. Hamlin. Oh, yes.

Mr. Marsh. But I have already brought out the point that we are going to put an extra section on that; that there will be no extra rate charged for passenger or freight service.

The CHAIRMAN. You have no sympathy with the claim that that region can be properly served by respecting the ancient rights of

this bridge company?

Mr. MARSH. No, sir; for the future. Under present conditions only one bridge is necessary. The future development is expected to come down here at the joining of two industrial centers. present bridge should be rebuilt and put under the new bridge law of 1905, putting the regulation of tolls under the War Department, which they are not now under, having been constructed under the law of 1866.

The CHAIRMAN. Then you do think conditions demand a change? Mr. Marsh. Yes, sir; especially with regard to rates. As a matter of fact, the local Army engineer, Maj. Meigs, whom I consulted in the matter, says that there is no need for another bridge there, that he was always opposed to the bridge over the dam and is now, and that the solution of the entire question is the rebuilding of the old bridge, strengthening it to carry any traffic under the Army engineers' specifications, and putting it under the new bridge laws of 1905 and subjecting the regulation of tolls to the Secretary of War. I told these gentlemen last night that if they did that, so far as any of us were concerned, we would have no opposition to it in any way.

The CHAIRMAN. I do not know that it is necessary to the discussion for you to trouble about the regulation of rates, but we want to get at the physical conditions out there and the commercial prospects. We have let you talk nearly an hour now, but when you come to revise your testimony you will have the opportunity to put in anything further, just so you do not change the sense.

Mr. Esch. Are the piers under the existing bridge sufficiently strong to support additional and heavier traffic with a new super-

structure?

Mr. Marsh. I can not answer that, because I never made a study of it.

Mr. GLMAN. They are strong enough.

Mr. Esch. So that another superstructure merely would strengthen

the bridge?

Mr. GILMAN. Yes, sir. The C., B. & Q. R. R. did it at Quincy while business was going on—strengthened the bridge—and we can do the same.

Mr. Marsh. There is another point I want to bring out which is very important.

The CHAIRMAN. Could you put that in the record?

Mr. Marsh. All right, sir.

STATEMENT OF COL. HARRY TAYLOR, FROM THE OFFICE OF THE CHIEF OF ENGINEERS, UNITED STATES ARMY.

Col. TAYLOR. I do not know exactly the points that you wish me to bring out. There are quite a number of statements that have been made while I have been sitting here that appear to require some comment. In the first place, Mr. Marsh spoke of changing the alignment of the lock. I was personally responsible for that change. When certain plans came up for approval I noticed the alignment and suggested that it should be changed a little, throwing the line over a little more from the power house. Upon investigation I was satisfied that the change was not in the least necessary for navigation and that boats were in no danger from being drawn into the waterwheels, but the change was advantageous for other reasons. The current will be so small in the fore bay there that it will be inappreciable—the current caused by the operation of the wheels. The top of the intakes is 8 feet below the water surface.

Mr. Stevens. What is the volume of the flow through the fore bay

and the volume needed by the turbines?

Col. TAYLOR. The turbines will take practically the entire flow.

Mr. Stevens. What is going to become of navigation?

Col. TAYLOR. I do not understand the question.

Mr. Stevens. Can you give us in inches the flow of water through the fore bay to the lock and the flow that is needed to operate the turbines, so that we could see for ourselves the comparative volume of water that is used for power and the amount needed for navigation?

Col. TAYLOR. The only amount that is used for navigation is that which is necessary to lock boats through, and that depends on the number of lockages. It is inappreciable as compared with the Mis-

sissippi River in any stage.

Mr. Stevens. Is it low in September and October?

Col. TAYLOR. Yes, sir. But all the water used in lockages would not lower that pool level a visible fraction of an inch.

Mr. Esch. What is the maximum height of the pool level?

Col. TAYLOR. They are going to limit it by the sluice gates. other words, they will back the water up at low water by means of gates that will be placed on the spillway, so that there will be no current over the dam at low water, whereas at high water there will be considerable.

Mr. STEVENS. What is the low-water period for navigation?

Col. TAYLOR. September and October.

Mr. Stevens. Oh, yes. Have you fixed a minimum for which operation can be had of those turbines during low water?

Col. TAYLOR. No, sir.

Mr. Marsh. There is an agreement, signed by the engineers of the Army, which has been kept secret from the light of day, whereby each night between sunset and sunrise the Mississippi River Power Co. shall have the right to store water at the rate of 15,000 the first hour, 10,000 the second hour, and 5,000 per hour the remainder of the time until before daybreak, and in the day let loose the surplus that they have laid up overnight, which amount to 21,000 cubic

feet per second.

Under this secret agreement, kept secret in this country, but which was published in England, every night that power company has the right to store away above the dam less than one fourth of the extreme minimum flow of 5,000 cubic feet per second. Whenever this is done. not only during navigation but during night hours and when the water is turned on in the morning that water will flow down the river. That is as monstrous a proposition as anything that has ever been permitted to any private corporation in the control of navigation of any of our big waters.

Col. TAYLOR. Mr. Marsh implies that that is a secret agreement.

I would like to deny it absolutely.

Mr. Stevens. You do not need to deny it. Col. Taylor. It is an absolute misstatement, to put it mildy, that there is any secret agreement between the Engineer Department and the Mississippi River Power Co. anywhere. If there is any agreement, it had the approval of the Secretary of War.

The CHAIRMAN. A good solution of the matter would be for you

to get a transcript of that.

Col. TAYLOR. Yes, sir. Every thing which was granted to the Mississippi Power Co. is in the permit, which was duly approved by the Secretary of War under authority of Congress. It is all in the permit.

Mr. Covington. Just insert the whole permit in the record.

The permit under which the Mississippi River Power Co. is acting consists of an act of Congress and certain actions which have been taken under that act, and in order that the matter may be correctly understood it is necessary to give rather a full history of the case.

The law authorizing the construction of the dam across the Mississippi River

at Keokuk. Iowa, is found in the following act of Congress:

CHAP. 566.—An act granting to the Keokuk and Hamilton Water Power Company rights to construct and maintain for the improvement of navigation and development of water power a dam across the Mississippi River.

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled, That the assent of Congress is hereby given to the Keokuk and Hamilton Water Power Company, a corporation created and organized under the laws of the State of Illinois, its successors and assigns, to erect, construct, operate, and maintain a dam, with its crest at an elevation of from thirty to thirty-five feet above standard low water, across the Mississippi River at or near the foot of the Des Moines Rapids, from Keokuk, Iowa, to Hamilton, Illinois, and to construct, operate, and maintain power stations on or in connection with the said dam, with suitable accessories for the development of water power, and the generation, use, and transmission therefrom of electric energy and power to be derived from the Des Moines Rapids on the Mississippi River: *Provided*, That in lieu of the three locks and the dry dock, with their appurtenances, now owned and operated by the United States, at the Des Moines Rapids Canal, the said Keokuk and Hamilton Water Power Company shall build, coincidentally with the construction of the said dam and appurtenances, at locations approved by the Secretary of War, a lock and dry dock with their appurtenances; the said lock shall be of such a kind and size and shall have such appurtenances and equipment as shall conveniently and safely accommodate the present and prospective commerce of the Mississippi River; the said dry dock and its appurtenances shall be such as to give space, facilities, and conveniences for the repair of vessels at least equal to those afforded by the existing Government dry dock and shops at the Des Moines Rapids Canal: And provided further, That the said dam and appurtenant works shall be so designed, located, constructed, maintained, and operated, and the said lock and dry dock, with their appurtenances, shall be so designed, located, constructed, and equipped as to permit at all times during the season of navigation and at any stage of water the safe and convenient navigation of steamboats and other vessels, or of rafts and barges, through the portion of the Mississippi River now occupied by the Des Moines Rapids, as well as through the entire length of the pool formed by the said dam: And provided further, That detailed plans for the construction and operation of the said dam, lock, dry dock, and appurtenant works shall be submitted to and approved by the Secretary of War before the commencement of any portion of the said works; and the said works shall be constructed under the supervision of some engineer officer of the Army designated for that purpose, and that after the approval of the said plans no deviation therefrom shall be made without the prior approval of the Secretary of War of any such deviation: And provided further, That compensation shall be made by the said Keokuk and Hamilton Water Power Company to all persons, firms, or corporations whose lands or other property may be taken, overflowed, or otherwise damaged by the construction, maintenance, and operation of the said works in accordance with the laws of the State where such lands or other property may be situated; but the United States shall not be held to have incurred any liability for such damages by the passage of this Act: And provided further, That when the said dam, lock, dry dock, and appurtenant works shall have been completed to the satisfaction of the Secretary of War, the United States shall have the ownership and control of the said lock, dry dock, and their appurtenances, and operate and maintain the same.

SEC. 2. That the withdrawal of water from the Mississippi River and the discharge of water into the said river, for the purpose of operating the said power stations and appurtenant works, shall be under the direction and control of the Secretary of War and shall at no time be such as to impede or interfere with the safe and convenient navigation of the said river by means of steamboats or other vessels, or by rafts or barges: *Provided*, That the said company shall construct such suitable fishways as may be required from time to time by the Secretary of Commerce and Labor.

SEC. 3. That, except as provided for below in this section, the Keokuk and Hamilton Water Power Company shall bear the entire cost of locating, constructing, maintaining, and operating the structures and appurtenances provided for in this Act: Provided, That the United States shall bear the cost of the supervision of the work by an engineer officer of the Army as provided for in section one of this Act. and also the cost of maintaining and operating the lock and dry dock with their appurtenances, after their completion and due acceptance by the Secretary of War on behalf of the United States: And provided further, That the Keokuk and Hamilton Water Power Company shall provide, in connection with such lock, dry dock, and appurtenances, a suitable power

plant for operating and lighting the same, according to plans and specifications submitted to and approved by the Secretary of War.

SEC. 4. That the Act entitled "An act granting to the Keokuk and Hamilton Water Power Company right to construct and maintain wing dam, canal, and power station in the Mississippi River in Hancock County, Illinois," approved

February eighth, nineteen hundred and one, is hereby repealed.

SEC. 5. That this Act shall be null and void if actual construction of the works herein authorized be not commenced within five years and completed within ten years from the date hereof.

SEC. 6. That the right to alter, amend, or repeal this Ast is hereby expressly reserved.

Approved, February 9, 1905.

The first action which appears to have been taken under authority of this act of Congress was a letter forwarded by Mr. Hugh L. Cooper, consulting engineer of the company, to the district officer, Maj. C. S. Riché, Corps of Engineers, in reference to the size of the lock which would conveniently and safely accommodate the present and prospective commerce of the Mississippi River. This was forwarded by Maj. Riché with a letter in which he discussed the size of the proposed lock. His letter was returned to him under date of March 29, 1906, with an indorsement from which the following is quoted:

"Inasmuch as the navigators of the Mississippi River are interested in the size of this lock and the plans for the entire improvement, it has been the intention of this office, when the plans shall be submitted as required by law for the approval of the Secretary of War, to have them examined and discussed at a public meeting, advertised in such manner that all concerned may have an opportunity to see the plans and to express their views. The size of the lock, which is a vital point, has not yet been so discussed. For this reason formal approval of that feature can not be given at this time."

Before Maj. Riché's report was received Mr. Cooper submitted certain general plans for approval. On August 13, 1906, a public hearing was held at Keckuk, Iowa, at which the plans submitted by Mr. Cooper were considered. As it appeared from the report on this hearing that the principal subject of discussion was the size of the proposed lock the plans were referred to a board of officers of the Corps of Engineers, consisting of Lieut. Col. C. B. Sears, Maj. C. McD. Townsend, and Maj. W. V. Judson, with instructions to hold another public hearing at which should be considered all general features of the plans in so far as they affected navigation. Such a public hearing was held at Rock Island, Ill., October 26, 1906. At this public hearing the dimensions of the lock were discussed, the effect of the construction of the dam upon the flow of the river, both above and below the dam, and the question of currents through the forebay below the power house. This hearing was a widely-advertised and well-attended hearing, and those in attendance were given every opportunity to discuss any phase of the subject which they desired. As a result of its investigation the board reported, under date of November 6, 1906, and the following quotations are made from the report:

"In the opinion of the board the structures proposed are of such strength and stability as to promise that navigation will not be interfered with through failure of any one of them. With regard to the lock, it is the opinion of the board that the dimensions of the lock chamber should be not less than 400 feet long and 95 feet wide in the clear. * * • Having given careful attention to the matter of currents immediately above the lock, the board recommends that the power house be built 150 feet eastward of the location shown on the plans, the azimuth of the power house and the relative positions of the westerly end of the dam and the power house to be retained as shown. Not only will this removal of the power house and of the westerly end of the dam diminish to an unobjectionable amount the cross currents above the lock, but space will be left between the proposed lock and the lower end of the power house for a new

and additional lock if such shall ever become necessary in the future.

Following the report of the board, under date of November 12, 1906, the plans were returned to the Secretary of War by the Chief of Engineers with the following indorsement:

"1. Respectfully returned to the Secretary of War.

"2. Under act of Congress approved February 9. 1905 (Public, No. 65), Mr. Hugh L. Cooper, consulting engineer of the Keokuk & Hamilton Water Power Co., submits plans for a dam, lock, dry dock, and appurtenant works to be built

by the said company in the Mississippi River at the Des Moines Rapids.

"3. These plans have been under consideration by the district officer, Maj. C. S. Riché, Corps of Engineers, and by a board of officers of the Corps of Engineers, consisting of Lieut. Col. C. B. Sears and Majs. C. McD. Townsend and W. V. Judson. Fully advertised public hearings have been held and all persons

concerned have had an opportunity to express their views.

"4. The plans submitted by Mr. Cooper contemplate a lock 80 feet by 350 feet, situated at the west end of the dam, and a dry dock placed between this lock and the bank. The power house through which the flow for the turbines is drawn is placed immediately above the proposed lock, in a portion of the dam which at this point runs nearly up and down stream, and therefore the upper approach to the lock is bounded on the river side by this power house.

5. Attention is respectfully invited to the accompanying report of the board. After careful consideration of the proposition, it concludes that the structures proposed are of such a strength and stability as to promise that navigation will not be interfered with through failure of any one of them, but that the plans for those portions of the structure which affect navigation require modification in certain stated ways before they should receive the approval of the War Department. The most important of the changes recommended are an increase in the dimensions of the lock and a change in position of the power house to avoid dangerous cross currents in the upper approach to the lock.

"6. I concur in the views of the board, and recommend that the accompanying copy of the report be furnished Mr. Cooper, with the information that the department is prepared to act favorably upon the general features of new plans embodying the changes recommended therein, but that drawings sufficiently in detail to show the different parts of the lock and dry dock and other matters affecting navigation should be submitted in order that the approval of the

department should extend to all parts of the structure.

'7. Attention is also invited to the requirement of the law that the plans for the operation, as well as for the construction of the dam, lock, dry dock, and appurtenent works, should be submitted to the department; to comply with this requirement a memoir describing the system of operation proposed for the plant should accompany the new plans.

"A. MACKENZIE.

"Brig. Gen., Chief of Engineers, United States Army."

Subsequent to this detailed plans have been submitted from time to time, have been carefully examined by the district officer and in the office of the Chief of Engineers, and approved by the Secretary of War upon the recom-mendation of the Chief of Engineers. The last plans submitted for approval were those for a proposed extension of the dam across the forebay. These plans were submitted to the Secretary of War with the following indorsement:

> "OFFICE OF THE CHIEF OF ENGINEERS, "November 22, 1912.

"To the SECRETARY OF WAR:

"1. The Mississippi River Power Co., successor to the Keokuk & Hamilton Power Co., is constructing a dam and accessory works across the Mississippi River from Keckuk, Iowa, to Hamilton. Ill., under authority of an act of Congress approved February 9, 1905 (33 Stats. L., 712), and in accordance with plans approved by the department. The general plans were approved September 30, 1911, and details of construction and modified plans have subsequently been approved from time to time.

"2. The company now desires approval of plans for an extension of the dam across the forebay, the proposed construction being in the nature of a bridge approach from the Iowa shore to the north end of the power house. The company also desires to modify the plans for the ice fender and to change the leation of the timber boom, plans for which were approved by the department June 6, 1912. The plans for the proposed bridge approach, and for the changes in ice fender and boom, are indicated on the accompanying blue prints.

"3. The district engineer officer, Maj. Keller, has examined the plans, and while he considers the general proposition unobjectionable, he is of the opinion that certain details are not wholly satisfactory. But before taking any steps to perfect the plans he prefers that a decision be reached as to whether the proposed dam extension can be approved by the Secretary of War under the aforesaid act, or whether it must be regarded as a bridge for which additional

congressional authority is required.

"4. It is understood that the construction is intended solely for the use of the power company, and that it is necessary for the proper and economical administration and operation of the dam and power works. In view of this, I am of the opinion that the construction, although in the nature of a bridge, may properly be held to be comprehended in the terms 'accessories' or 'appurtenent works,' employed in the statute, and that under the broad powers thereby conferred. It would be competent for the Secretary of War to approve the plans. If this be the view of the Secretary of War, I recommend that the plans for the proposed extension, and for the changes in the ice fender and timber boom, exhibited on the drawings submitted, be approved subject to such changes in details as the district engineer officer, upon further study, may deem necessary and desirable from an engineering standpoint; and subject to the express condition that the said construction shall be applied solely to the purposes of the company in the maintenance and operation of its works, and shall not be used as a commercial crossing or highway for vehicular, railroad, or other land travel or transportation.

" EDW. BURB,

"Colonel, Corps of Engineers, Acting Chief of Engineers."

On November 26, 1912, the plans were approved by the Acting Secretary of War as follows:

Whereas the Mississippi River Power Co., successor to the Keokuk and Hamilton Power Co., is constructing a dam and accessory works across the Mississippi River, from Keckuk, Iowa, to Hamilton, Ill., under authority of an act of Congress approved February 9, 1905 (33 Stats., 712), and in accordance with plans which have received the prior approval of the War Department; and whereas said Mississippi River Power Co. has now presented for approval plans for an extension of the dam across the forebay (the proposed construction being in the nature of a bridge approach from the Iowa shore to the north end of the power house), and also modified plans for the ice fender and timber boom, the plans for which were approved by the War Department on June 6, 1912;

Now, therefore, in accordance with the recommendation of the Chief of Engineers, United States Army, the Secretary of War hereby approves the plans for the proposed extension of the dam across the forebay and for the changes in the ice fender and timber boom, which plans are hereto attached, upon the following conditions:

1. That the plans are approved subject to such changes in details as the district engineer officer, upon further study, may deem necessary and desirable

from an engineering standpoint.

2. That the said dam extension shall be applied solely to the purposes of the grantee in the maintenance and operation of its works, and shall not be used as a commercial crossing or highway for vehicular, railroad, or other land travel or transportation.

Witness my hand this 26th day of November, 1912.

ROBERT SHAW OLIVER, Acting Secretary of War.

As actually constructed the lock will be 110 feet in width and 600 feet in length, the increase in size of the lock over the dimensions recommended by the board of engineers in its report of October 26, 1906, being voluntary on the part of the Mississippi River Power Co. In other ways the company has shown every disposition to build structures which would meet in the best possible manner the demands of present and prospective commerce on this section of the

The question of the effect on navigation of the irregular flow past the dam, due to the greater development of power during some portions of the day than on others, and the storing of the water during portions of the day when the power development is light, was given very careful consideration, both by the district officer, by boards of engineers who were appointed to consider it, and by the Chief of Engineers. The final recommendations in regard to this matter were made in a memorandum by the Chief of Engineers for the Secretary of War under date of March 24, 1908. This memorandum was approved by the Secretary of War March 26, 1908, and is in full as follows:

WAR DEPARTMENT,
OFFICE OF THE CHIEF OF ENGINEERS,
Washington, March 24, 1908.

Memorandum for the SECRETARY OF WAB:

In the matter of the proposed modification of conditions to govern the operation of the plant of the Keokuk & Hamilton Water Power Co., at the Des Moines rapids of the Mississippi River, it is proposed by the company that, for the conditions approved by the Secretary of War under date of January 8, 1907, a copy of which is herewith, there shall be substituted conditions now presented by Mr. Hugh L. Cooper, hydraulic engineer of New York, and consulting engineer of the company.

The new conditions differ from the former ones mainly in a closer definition of the permissible daily fluctuations of flow at extreme low stages which it is

now proposed to establish as follows:

1. During the hours of daylight, during the navigation season, between surrise and sunset, the power company shall not store water behind the dam.

2. During the navigation period and during the hours of darkness, between sunset and sunrise, the power company may store water behind the dam, provided that during at least two hours of such interval of darkness the power house shall pass water at not less than an average rate of 15,000 cubic feet per second, and during at least six other hours of period of darkness referred to in this paragraph the power house shall pass not less than an average rate of 10,000 cubic feet per second, and for the remaining hours of darkness the power house shall discharge not less than 5,000 cubic feet per second.

3. That when the flow of the river is not greater than 20,000 cubic feet per second, the power company shall pass through the dam during the daylight hours, in addition to the then flow of the river, an additional quantity of water equal to that stored during the next preceding hours of darkness from sunset

to sunrise

4. That at any future period if the flow in the Mississippi River should fall below 20,000 cubic feet per second and the power company should not be passing water through the dam for power purposes equal to the total average discharge mentioned above, the power company shall be required to draw from its storage in aid of navigation, under stipulations to be specified from time to time by the engineer in charge of the district, that amount of storage that exists behind the dam above elevation 519, which is equivalent to drawing the pond 4 feet in aid of navigation during the time when the river might be lower than 20,000 cubic feet per second. In this paragraph it should be noticed that the crest of the dam is elevation 523, as now stipulated by the Government.

5. That at any future time after the beginning of the operation of these works, the Government should be making improvements in the channel below the dam, the power company shall pay to the Government the sum of \$50,000 for such use as the Government sees fit in the regulation of the channel below the dam.

6. That under the foregoing arrangement the power company would have no responsibility beyond the payment of \$50,000 herein specified, below the dam, other than the specific stipulations required in the foregoing paragraphs.

7. That the power company will excavate a channel from the mouth of the new lock to the deep water below the Keokuk and Hamilton bridge, 7 feet deep below normal low water, and having a width of 200 feet, the expense of this excavation to be borne by the power company, and the work to be done at the time of the building of the lock.

The first proposition of the company was for the privilege of complete interruption of flow during the night for the purpose of storing water to provide a greater development of power during the hours of load. This was summarily rejected by the Chief of Engineers as being obviously inimical to the interests of navigation. The right of fluctuation secured to the company by this new proposition is so greatly restricted that, in the opinion of the Chief of Engineers, it can not now be determined by the application of any hydraulic formula that there will be any appreciable fluctuation of stage which could be detrimental to navigation, and it is his opinion that any such fluctuation as is likely to occur will be restricted to periods of prolonged extreme low water, which the records of the river show is likely to occur not oftener than once in a period of 8 or 10 years.

At such period it seems altogether probable that such fluctuations as occur will be above and below the mean, or the level of flow which would be secured by the normal discharge of the river if the dam were absent; that these fluctuations will be diurnal, and that for any hour of any day in which there can possibly be a defect of depth there will be one of more hours in which there will be a corresponding excess of depth over that which could be guaranteed to navigation by the unrestricted flow of the river in its open channel.

Considering the slight possible effect, and the rare intervals at which they can possibly occur, and the present uncertainty as to whether they ever will occur, the Chief of Engineers is of the opinion that the interests of navigation on the Mississippi River will be adequately protected if these propositions receive the

approval of the Secretary.

It will be noted, moreover, that the company obligates itself to contribute \$50,000 whenever required to aid in any work which the Government may find itself obliged to do below the dam for the purpose of increasing the depth in that portion of the river. This appears to the Chief of Engineers a substantial contribution to any expense which may be incurred.

Mr. Cooper advises the Chief of Engineers that the financing of the whole proposition is now at a crisis, and that it must stand or fall on the present decision. That is to say, if these propositions are accepted by the War Department, the work will be built by the power company, and if these propositions are not accepted by the War Department, the financing of the whole enterprisemust fail and the works can not be built. Attention should therefore be invited to the very great advantages resulting to the navigation of the river by the construction of these works. These are—

First. The elimination of two locks in passing the Des Moines Rapids, sub-

stituting one lock for the three.

Second. The substantial increase in dimensions of this lock, thus enabling commerce to be developed which, with the present works, would be impossible. This feature is very greatly emphasized, and its value to the river commerce is urged in the strongest terms by the leading representatives of the river interests, as evidenced by the stenographic reports of hearings on file in this office.

Third. The substitution for a canal trunk 111 miles long, of limited width and depth, of a wide and deep pool 40 miles long, carrying a navigation of the best

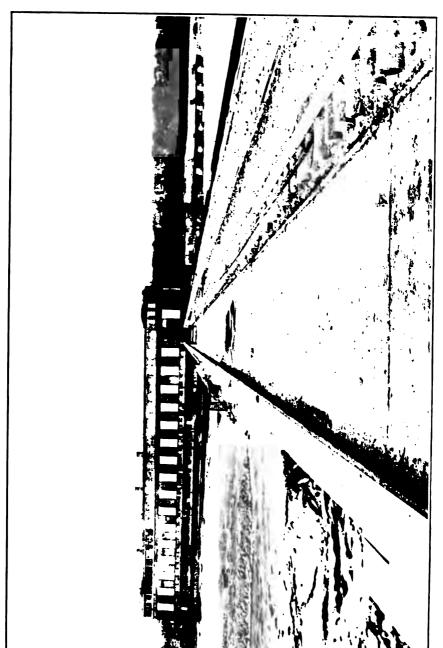
possible type from Keokuk practically to the city of Burlington.

Fourth. The reconstruction of the Government drydock at Keokuk on presumably improved plans, and certainly substituting a new work for an old one.

The money value of these betterments to navigation is placed by Mr. Cooper at \$3,500,000. The Chief of Engineer does not vouch for this estimate, but is prepared to say that the advantage to navigation from the construction of the dam and new lock is exceedingly great. It seems to be well established that these advantages to navigation must be sacrificed if the present propositions are unfavorably considered by the War Department.

> A. MACKENZIE, Brigadier General, Chief of Engineers, U. S. Army.

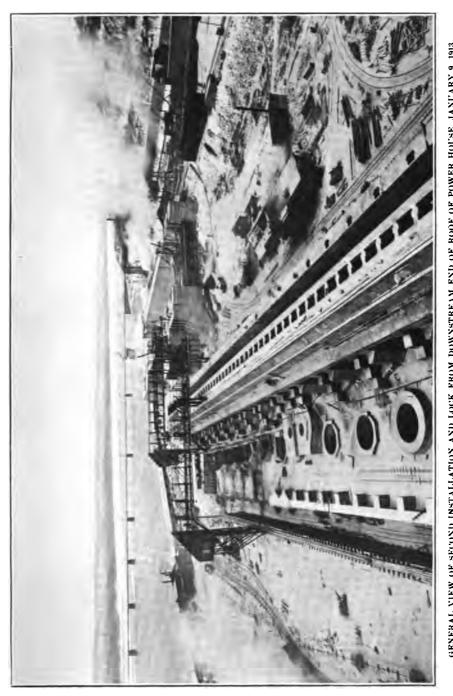
The character of the work which is being done is very well shown by the attached photographs. The nearly completed lock and the existing Hamilton & Keokuk Railroad bridge are plainly shown on photograph No. 910. Photograph No. 880 gives a view of the top of the dam and shows the river side of the power house. The lock and forebay are between the power house and the shore. The general construction of the dam is plainly shown on photographs Nos. 881 and 911. These show the close spacing of the piers supporting the roadway, and the solid spillway in the arches which is in no wise affected by any strains which may be put upon the tops of the arches. It is the solid lower part of the dam which forms the barrier to the water and which causes it to back up and form the pool above. The arches could be entirely removed without in any way affecting the conditions of flow. The roadway is built mainly for the purpose of operating a machine which will raise and lower the sluice gates which slide up and down in the slots shown at the upstream ends of the piers on photograph No. 881. Photographs Nos. 881 and 911 also show the relatively small section of the river required to carry the flow at or near low water. In photograph No. 911 a small launch may be noticed in the current but a short distance below the dam.



TOP OF DAM SHOWING SURFACING, NOVEMBER 10, 1912. 890. Illinois Division.

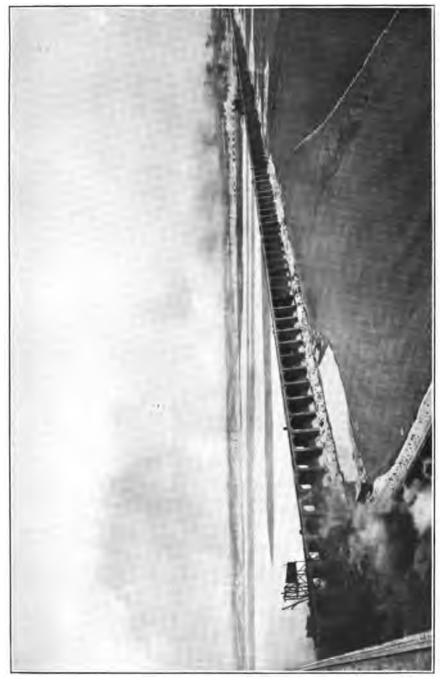






GENERAL VIEW OF SECOND INSTALLATION AND LOCK FROM DOWNSTREAM END OF ROOF OF POWER HOUSE, JANUARY 9, 1913. 910. Town Division.

÷		



VIEW OF DAM FROM DOWNSTREAM END OF ROOF OF POWER HOUSE, JANUARY 9, 1913. 911. Illinois Division.



Mr. Stevens. Now, what have you to say about this, Colonel: Is there a sufficient allowance at the minimum stage of water in the river for a sufficient flow over the dam or through the locks or through the turbines for the successful navigation of that river below the dam to complete the project fixed by Congress?

Col. TAYLOR. This project was approved before I came into the office of the Chief of Engineers, so I do not know if it is so or not, but I assume that it has already been investigated, it being the duty

of the War Department to look after navigation.

(Note.—See reference to this question in matter inserted above.)

Mr. Esch. Under the plans proposed by the water power company
for their bridge across the forebay, what allowance do they make for

free water way through the bridge?

Col. TAYLOR. Through the bridge the draw—the opening—is 175 feet in the clear. Reference was made to the fact that the change in the opening in the ice fender was made to permit that to be in line with the opening of the drawbridge. The provision with regard to the change in the opening of the ice fender was made before plans for the proposed bridge were presented for approval.

Mr. COVINGTON. As a matter of fact, is the opening in the ice fender and the draw of the bridge in such a line as will make easy navi-

gation in your judgment?

Col. TAYLOR. I think so. The center of the opening in the draw is absolutely in line with the center of the lock. Here is the position [indicating].

Mr. E. W. Martin. It only requires a slight change of course.

Col. TAYLOR. This shows the location of the dam. The locks in operation are here [indicating]. The construction of the dam had been approved before this application ever came into the office. One had absolutely nothing to do with the other at all.

Mr. E. W. Martin. On that map I did not notice the reverse curve. Col. Taylor. The reverse curve that Mr. Marsh spoke of is over here [indicating]. Now, there is another thing that was not brought out, and that is that at the time this location of the lock was approved the company was notified that, if necessary, they would be obliged to put in a line of fenders in the prolongation of the lock as far up the fore bay as might be required to protect navigation, and they agreed to that and said they were perfectly willing to put in a line of fenders if it was necessary.

Mr. E. W. Martin. How far would that fender be from the power

house i

Col. TAYLOR. I should say it would be probably about 150 feet at this end [indicating] and probably 300 feet at the other, which would be an average of about 200 feet, and that in very deep water. We would require them, if necessary, to put in solid concrete piers or anything else that we thought necessary to protect navigation.

Mr. Esch. Is it a concrete fender?

Col. TAYLOR. No, sir; that [indicating] is a floating fender, which

will be drawn away entirely in the navigation season.

Mr. Stevens. Colonel, in order to make sure, in revising your testimony I wish that you would place into the record a clear statement that there will be water that will go over this dam and that there will be sufficient below the dam to fill the channel at low water during

the period of low navigation, so that the 6-foot project from St. Louis and St. Paul can be utilized at all times.

Col. Taylor. Yes, sir; I will do the best I can.

Note.—See information inserted above.

The CHAIRMAN. I would like you clearly to demonstrate how the vessels can safely get around the lock and under that bridge.

Col. TAYLOR. Yes, sir. The statement was made that a hearing was

denied to the navigation interests-

Mr. Marsh (interposing). I beg your pardon. I did not say that.

I said they were never informed of it.

The CHAIRMAN. Did you not say that if it had not been for you it would have been slipped through?

Mr. Marsh. Yes, sir.

The CHAIRMAN. It is mighty hard to slip a thing through as slow a

thing as this committee.

Col. TAYLOR. When that application came in it came to my desk first, and I considered it very carefully. In considering Maj. Keller's statement I could see no reason why the proposed extension of the dam should be any serious obstruction to navigation. Of course the navigation interests would like to have an absolutely clear river from bank to bank, but we have to distinguish between reasonable and unreasonable obstructions, and that did not look like an unreasonable obstruction. In fact, a bridge with a suitable draw across the still water just above a lock is as little an obstruction as any bridge can be.

Mr. Stevens. There would not be enough of a current to move any

vessels in that river?

Col. TAYLOR. Not sufficient to endanger them. Mr. Escir. What is the velocity of that river?

Col. TAYLOR. At the foot of the rapids?

Mr. Esch. The lock would not prevent the water from running over the dam. I was wondering what the natural velocity of the stream was.

Col. TAYLOR. The dam is 3,600 feet long-4,700.

Mr. Esch. When that plant is in operation that will all be turned into the forebay.

Col. TAYLOR. Yes, sir; the fore bay is 1,700 feet long parallel to the

power house.

Mr. Esch. Taking that water which has had 1,700 feet of channel to flow in, is it not possible that it is going to create a great current

in order to get that water through there?

Col. TAYLOR. The river, you will understand, is very shallow in here [indicating], but in here [indicating] the water will be very deep, so that the current in this fore bay will be much less than it was in the natural river. Of course, the water has got to get away, but the cross-section of the fore bay is quite large [indicating], and the water will be about 40 feet deep.

Mr. E. W. MARTIN. Has your office made any estimate about what

the current will be?

Col. TAYLOR. I suppose the Rock Island office has.

Mr. Stevens. Colonel, I think it might be of interest to the committee. Will you state the methods adopted by the Corps of Engineers in considering bridge matters at this time and in informing the public and the navigation interests as to what is intended to be

done, so that they can be heard? What do you always do?

Col. TAYLOR. In every case of a request to construct a bridge over a navigable water it is referred to the district officer, and in almost every case he is authorized to hold a public hearing, giving everybody an opportunity to appear.

Mr. Stevens. In what way?

Col. TAYLOR. In the local papers and also by sending circular letters to everybody interested in it.

Mr. STEVENS. That is to say, to all these civic associations, steam-

ship lines, and Members of Congress?

Col. TAYLOR. Yes, sir.

Mr. Stevens. I always get them.

Col. Taylor. Everybody gets the letters who is known to be or supposed to be in any way interested in navigation.

Mr. Stevens. Do you know what was done in this case?

Col. TAYLOR. In this case I do not think that the public hearing was held.

Mr. Stevens. Why not, please?

Col. TAYLOR. It was considered a detail of the construction of the dam. The bridge was asked for in connection with the use of the dam. If we had considered that the navigation interests would have had the slightest objections to it in any way whatever we would have held a public hearing and given them the opportunity to state their views and see that they were perfectly satisfied.

Mr. Stevens. Would not an inspection of the plans show that the bridge contemplated something else besides the mere use in connec-

tion with the construction of the dam.

Col. TAYLOR. That is correct, but in granting the permit to the company it was specifically stated that this structure should not be used as a public bridge without specific authority from Congress.

Mr. Stevens. So that this act practically amounts to issuing a permit for specifications which you have already approved. Is

that it?

Col. TAYLOR. Yes, sir.

The CHAIRMAN. But not for public purposes?

Col. Taylor. No, sir. The act authorizes the construction of a dam, with all the details to be subject to the Secretary of War. Under that authority all the details have been presented to the Secretary of War for approval and we considered this a detail of the construction of the dam. The reason that was given in the application for the construction of this bridge was that it was necessary for them to get their apparatus out on the dam for the purpose of operating their sluice gates. Whether that was good reason or not I can not say.

The CHAIRMAN. What is Maj. Keller holding hearings for now? Col. TAYLOR. Because Mr. Marsh has stirred up the navigation

interests.

Mr. Marsh. At the request of President Wilkinson.

Col. TAYLOR. Well, at any rate, somebody has stirred up the navigation interests.

The CHAIRMAN. You ordered that hearing to be held by Maj.

Keller?

Col. TAYLOR. The hearing was called by Maj. Keller as soon as he heard that navigation interests had any doubts in the matter.

Mr. Stevens. It is never too late to stop it?
Col. TAYLOR. No, sir; but if it is demonstrated that the navigation interests are going to be injured in the least, we can change it so as to protect navigation interests.

Mr. Stevens. You always do that? Col. TAYLOR. Yes, sir; we try to.

The CHAIRMAN. I have no doubt on earth that the Corps of Engineers will duly safeguard the interests of navigation, but what about the policy and practice of permitting a combination of two different enterprises? Bridges are one thing, built under the general bridge act, and dams are another thing, built under the general dam act. Is it possible that trouble and confusion might arise from mongrelizing these enterprises?

Col. Taylor. It seems to me that is a question for Congress to

settle.

The CHAIRMAN. Is it not a question that trouble might arise in your administration—trouble in discipline—between the two acts?

Col. TAYLOR. I do not think so; no, sir.

Mr. Stevens. It would arise in this way, Colonel. You have to pass on the specifications for the construction of the dam, do you not ?

Col. TAYLOR. Yes, sir. This has been inspected with much more than usual care.

Mr. Stevens. You did that on the theory that it would be used for a dam?

Col. TAYLOR. Yes, sir.

Mr. Stevens. And forming a pool to hold back the water?

Col. TAYLOR. Yes, sir.

Mr. Stevens. Does it require more strength for you as a rail-

road bridge than for use as a dam merely?

Col. Taylor. The two structures are subjected to entirely different stresses, due to the different use as a dam from what it would be for use as a bridge.

Mr. Stevens. Exactly. Now, have you considered that?

Col. TAYLOR. Yes, sir; we have. Mr. Stevens. What is the construction?

Col. TAYLOR. Concrete. Mr. Stevens. Reenforced?

Col. TAYLOR. No; the main part of the dam is not reenforced.

Mr. Stevens. Did you consider it safe from an engineering stand-

Col. TAYLOR. Entirely.

Mr. Stevens. You have had a precedent, so that you feel sure that the vibration would not cause deterioration that would be seri-

Col. Taylor. Yes, sir. There are thousands of great viaducts in the country that are not reenforced that are used by railroads on their main lines, with many trains going over them every day.

The CHAIRMAN. Now, whether they are privileged by one company or whether they are privileged by different companies, if either merger company failed to carry out the conditions of their agreement is it not possible that there would be difficulty in inflicting penalties on bridge companies and dam companies?

Col. TAYLOR. I see the point, but we do not anticipate any trouble

Mr. Esch. So far as the department is concerned, it makes no difference whether it is for private use or for public use?

Col. TAYLOR. No, sir.

Mr. Esch. Now, would you, representing the department, see other objections to the use of that forebay for general traffic purposes that

do not seem serious for the purposes of the company alone?

Col. Taylor. It would depend altogether upon the amount of traffic over the bridge and the amount of traffic through the locks. If there is sufficient traffic on the bridge and if there is sufficient traffic on the river one might interfere with the other.

Mr. Esch. Would that be any objection to granting the use of the

bridge for all traffic purposes?

Col. TAYLOR. That would apply equally well to any bridge on that river. If the traffic on that river becomes so heavy that the bridge is going to be an obstruction to navigation, why the other bridge below is going to be an obstruction to navigation.

Mr. Esch. You think the traffic could be handled as well over that

bridge as at another point?

Col. TAYLOR. Yes, sir.

Mr. Covington. The present power company absolutely compels all navigation to pass in that forebay?

Col. TAYLOR. Absolutely.

Mr. Covington. So that that is a definite proposition?

Col. TAYLOR. Absolutely.

Mr. Covington. Whether this bridge is used for viaduct purposes or whether it is used for railroad trains, all boats will have to pass

through that point?

Col. TAYLOR. Yes, sir; absolutely. Now, the point has been brought out that boats coming down here would have to come very slowly. A boat approaching any lock has got to come toward the lock at a very low speed or else be in danger of going through the gates. the boat gets out here [indicating] she is more likely to be affected by the suction of the wheels as she enters the lock.

Mr. Cullop. The construction of this bridge constitutes no addi-

tional obstruction to navigation?

Col. TAYLOR. No, sir. Any bridge offers an additional obstruction to navigation.

Mr. Cullop. But the dam being there-

Col. TAYLOR (interposing). Oh, the use of the dam? Mr. Cullop. Yes.

Col. TAYLOR. Well, the use of the dam does not obstruct navigation.

Mr. Cullor. So that the use of this dam as a bridge does not affect ' navigation?

Col. TAYLOR. Not the slightest.

Mr. HAMLIN. There was some evidence here this morning that at low-water periods the low water would create a suction and that boats coming here [indicating], slowing, might be drifted out of their

Col. Taylor. In my opinion that is not correct, but if there is an interference with navigation we will compel the power company to put in a series of piers here [indicating] to protect as far as necessary the boats and keep them from getting within 300 feet of the

power house.

Mr. Covington. The matter of what amount of water there is in that forebay is not now a matter with which the construction of the bridge is concerned. That is determined entirely by the lock and dam construction.

Col. TAYLOR. Absolutely.

Mr. Cullop. What objection do you see in the administration of the two acts, one for bridge purposes and the other for dam purposes, if any?

Col. TAYLOR. Well, I have not anticipated the slightest difficulties. Mr. Cullop. You think no complication would be brought about?

Col. TAYLOR. No, sir.

Mr. Cullop. Would that give trouble to the War Department?

Col. TAYLOR. No, sir.

Mr. Cullop. The control of both enterprises?

Col. TAYLOR. I do not think so.

The CHAIRMAN. Would compliance with the consent of the one make it more difficult without the consent of the other?

Col. TAYLOR. I do not think so, because they relate to different

features.

The CHAIRMAN. If they were both identical there would be no trouble?

Col. TAYLOR. No, sir.

The CHAIRMAN. But suppose there is some defect in the conduct of the bridge company that would vitiate the dam people?

Col. TAYLOR. We could then get after them to move the bridge.

The CHAIRMAN. Suppose the dam company was the criminal to blame. You could not remove them and leave the bridge?

Col. TAYLOR. That is true. The bridge company would have to

suffer.

Mr. Joy. We are asking for the use of the dam as a bridge.

The CHAIRMAN. I do not know of any authority to permit a non-existing bridge to use something else as a bridge. We can only act in

accordance with the provisions of the general bridge act.

Mr. Hamilton. They specify a place in their bill on top of this dam. The Chairman. We will have to change that in our legislation. We will not grant the consent until we have sufficiently interrogated the War Department as to whether they are going to locate it at a proper place; and if we ever grant the permit, it will be in accordance with the general dam act, which means that the War Department is going to authorize it. The one question before us is, Are we going to consent to this company building a dam with the consent of the War Department? That is the only question before us, and nobody gets any vested rights or any monopoly from this committee, or ever did from Congress, except the consent that they might put a structure in a river with the permission of the War Department.

Mr. Hamilton. I have wondered whether you might not have in mind the departure from the practice in this case in connection with

this bridge.

The CHAIRMAN. We want to find out what the War Department is going to do about it.

Col. TAYLOR. There is another thing I would like to state. statement has been made as to why the Engineer Department did not approve the bridge below, and the sole ground apparently was that there were enough bridges there already. This is a report submitted by the Chief of Engineers to the Secretary of War on the application by the Hamilton, Wausau & Keokuk Bridge Co. I will quote from it:

> Office, Chief of Engineers, January 11, 1913.

To the SECRETABY OF WAR:

Returned.

2. The object of the accompanying bill, S. 7565. Sixty-second Congress, third session, is to authorize the construction of a railroad, wagon, and foot-pas-menger bridge proposed to be constructed across the Mississippi River near

Keokuk, Iowa. by the Hamilton, Warsaw & Keokuk Bridge Co.

8. All bridges, no matter how favorable the locations, are more or less obstructions to navigation, and a bridge built as proposed would probably be more obstructive than most bridges now existing within the limits of the Rock Island district. The channel approaches will be more or less unfavorable, and the draw might have to be located at some little distance from the shore, which is contrary to the best practice.

4. Attention is invited to the fact that there is in existence a bridge (Keokuk and Hamilton bridge) a short distance above the proposed location, which is available by law to all railroads, and which, although understood to be of inadequate strength for modern railway equipment, could be rebuilt of greater

width and strength and with a wider draw span.

5. It is understood that there is much dissatisfaction with the rates charged on this bridge. Attention is invited in this connection to the restrictions as to rates imposed by section 1 of the act of July 25, 1866, which authorized the construction of the bridge.

6. Another bridge, if needed, could be afforded by the concrete dam of the Mississippi River Power Co., at Keokuk, the extension of which dam to the Iowa shore across the fore bay has already been authorized as an accessory to the water-power development. The bridge on this dam proposed in H. R. 26672, Sixty-second Congress, third session. report upon which will be submitted to the Secretary of War in the near future, would not offer any additional obstruction to navigation, and if authorized, would obviate any real necessity for the bridge proposed in this bill (S. 7565).

7. From the point of view of this office, the bridge proposed in the bill under consideration should not be authorized unless a very strong showing of future east and west traffic can be made, and not until it is shown that this traffic is beyond the capacity of the existing bridge to accommodate when reconstructed as above suggested, and of the proposed bridge over the dam, and if authorized, the bridge owners should be required to make and maintain to and through the bridge such channels as the Secretary of War may later decide to be

necessary to the interests of navigation.

W. H. Bixby,

Chief of Engineers, United States Army.

The district officer's report on this bill was as follows:

United States Engineers Office, Rock Island, Ill., December 24, 1912.

. No the Chief of Engineers:

1. The wording of the bill appears correct.

2. All bridges, no matter how favorable the locations, are more or less obstructions to navigation, and a bridge built as proposed would probably be more obstructive than most bridges now existing within the limits of this district. The channel approaches will be more or less unfavorable, and the draw might have to be located at some little distance from the shore, which is contrary to the best practice.

3. As a matter of public and good business policy, it does not seem advisable to permit this additional hindrance to navigation while there is an existing bridge a short distance above, available by law to all railroads, which, although of inadequate strength for modern railway equipment, could be rebuilt of greater width and strength and with a wider draw span. Further, a much better bridge would be afforded by the concrete dam of the Mississippi River Power Co. at Keokuk, the extension of which dam to the Iowa shore across the fore bay, as an accessory to the water-power development, has already been authorized. The bridge on this dam, proposed in H. R. 26672, would not offer any additional obstruction to navigation and, if authorized, would do away with any real necessity for the bridge proposed in this bill (H. R. 26559).

4. This bridge should not be authorized unless a very strong showing of future east and west traffic can be made, and not until it is shown that this traffic is beyond the capacity of the existing bridge to accommodate when reconstructed as above suggested. Further, the restrictions as to rates imposed by section 1 of the act of July 25, 1866, should be invoked to apply to charges over the present bridge. It is asserted that these charges are now exorbitant, and this is the chief, perhaps the only, good reason for desiring to build a new one. If authorized, the draw openings should be not less than 200 feet clear width, or, if a single opening, not less than 225 feet. A guide fence or boom, of sufficient length and strength, and at proper angle to guide boats safely through the west draw opening of the bridge, should be installed above it.

5. A fair objection to all low bridges crossing alluvial rivers is that they impose absolutely fixed locations for the channels through them. River improvement does not, as a rule, permit the fixing of the channel within the narrow limits thus imposed, and an amendment of the general bridge act to require owners of bridges to maintain the channels to and through their bridges to such extent as might be required by the Secretary of War would seem both fair and desirable. In the case of the proposed bridge, such requirement should be embodied in the act authorizing its construction, which, except for the reasons above noted, is free from objection.

C. KELLER,
Major, Corps of Engineers.

The CHAIRMAN. It might be necessary for those two railroads to pay toll?

Col. TAYLOR. Of course; that is assumed in the bill granting that

authority.

The CHAIRMAN. If we grant consent to build this lower bridge, you

do not have to build it unless the plans suit you?

Col. Taylor. No. sir. The Engineer Department does not look with favor upon the construction of a bridge below the existing bridge unless it is absolutely necessary.

The CHAIRMAN. But if commercial interests think it is necessary to have that bridge, they are compelled to meet your views if you

prepare the specifications?

Col. TAYLOR. Yes, sir. If they convince the committee that it is

necessary, we have nothing to say.

As throwing some light on the necessity for the construction of this bridge, the following is quoted from a letter now filed in the office of the Chief of Engineers:

WARSAW, ILI.., November 5, 1912.

SECRETARY OF WAR, Washington, D. C.

DEAR SIR: I have the honor to present for your consideration a copy of a bill to be introduced in the next Congress asking for a franchise to build a highway and railroad bridge across the Mississippi River from a point on the Iowa shore near and north of the mouth of the Des Moines River to a point on the Illinois shore between the cities of Hamilton, Ill., and Warsaw, Ill. This franchise is asked in the name of the Hamilton, Warsaw & Keokuk Bridge Co., a corporation recently formed under the laws of Illinois, for the purpose of construction and operating said bridge.

PURPOSE OF THE BRIDGE.

The purpose of this bridge is to afford satisfactory railroad access to the roads desiring to enter the new industrial communities on both sides of the

river, which are being developed as a result of the development of the water power of the Mississippi River by the dam and power plant of the Mississippi River Power Co., located near by.

In view of the great industrial development now under way in this vicinity, the necessity of a new bridge has become apparent not only to the railroads entering and wishing to enter the industrial cities on each side of the river, but to the adjacent cities of Keokuk, Hamilton, and Warsaw as well.

As I am interested in the industrial development of these communities, I have for some months past been making an investigation of the bridge question. Representatives of four large railroads, the Toledo, Peoria & Western (Pennsylvania), Baltimore & Ohio, Wabash, and Santa Fe, have assured me that they would be willing to cooperate in the building of the new modern bridge across the river at the point asked for in our franchise, provided that the dam now being constructed would not be used as a freight and passenger bridge.

PROVISION TO USE THE MISSISSIPPI RIVER POWER CO.'S DAM AT KEOKUK AS A BRIDGE.

There is a movement on foot to secure the right to use this dam as a bridge. Petitions and plans to this end will, I understand, be presented to you by the Keokuk Industrial Association very shortly. Should this right be granted, the necessity of the bridge we contemplate building would not exist.

I have gone into this in such detail because I wish to make clear the fact that, as far as the interests of the adjacent communities are concerned, the bridge asked for by our company will serve all needs as well as the bridge over the dam. And this location, fully 2 miles to the south, would not cause unusual congestion and obstruction to navigation that would otherwise result. If the dam should be used as a bridge, the great cost of building another bridge would not be warranted. In the petition to Congress the rights we ask are entirely subject to the control of the War Department as to location, design, construction, and tolls. A copy of the bill which will be presented to Congress is herewith attached, together with a map of the desired location of the bridge.

Hoping for a favorable consideration of our project from the War Department, I am,

Respectfully.

RICHARD OGLESBY MARSH,
President Hamilton, Warsaw & Keokuk Bridge Co.

The above letter was referred to Maj. Charles Keller, Corps of Engineers, the district officer, and in his report of November 19, 1912, he states as follows:

2. The limits proposed for the location of the desired bridge include no site free from objection on the part of navigation. Within these limits approach to the bridge would be oblique, and the bridge might be dangerously near the present structure.

3. As a matter of public policy, there is a decided objection to the duplication of facilities not now used to capacity. The existing railroad bridge and its approaches could readily be altered so as to accommodate any possible traffic, and this could be done at considerably less cost than entirely new facilities could be provided. The popular demand for conservation of resources applies to financial as well as other resources, and at this time, when railroads are complaining of their high cost of living, I can see no good reason for building an entirely new bridge. If the railroads mentioned by Mr. Marsh are really in earnest, they can no doubt make fair arrangements for the reconstruction and use of the existing bridge. It is possible that the War Department might be able to assist by enforcing the provision as to the use of the existing bridge by all railroads upon payment of a reasonable compensation.

4. When the suggested act is presented for the action of the Chief of En-

gineers, I recommend that it be disapproved.

C. KELLER,

Major, Corps of Engineers.

The above-quoted letter contains also the following:

Mr. Montgomery Meigs, United States engineer in charge of the canal and locks at Keokuk, has told me that he is opposed to using the dam as a bridge

and that he thinks Maj. Charles Keller, United States Army, engineer in charge

at Rock Island, holds the same views.

Under date of December 16, 1912, Mr. Montgomery Meigs, in an official communication to Maj. Keller, states as follows: "I have carefully examined the plans for a Mississippi bridge at or near the mouth of the Des Moines, prepared by Mr. R. O. Marsh, and transmitted in yours of December 9, 1912. It seems to me highly inadvisable to encumber navigation with this bridge when there is already one bridge at Keokuk only half used to capacity, and the much better bridge afforded by the concrete dam of the Mississippi River Power Co., virtually authorized by the Secretary of War, subject to the approval of Congress.

Mr. Sims. I call your attention to the act under which the original bridge was constructed.

Col. TAYLOR. I would like to say that I am not very familiar with this subject because it is a branch which does not come under me.

Mr. Sims. I see that the regulation for the rates or tolls is the same as for the rates on the Quincy & Burlington Railroad.

Col. TAYLOR. This section reads as follows:

CHAP. 246.—An act to authorize the construction of certain bridges, and to establish them as post roads.

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled, That it shall be lawful for any person or persons, company or corporation, having authority from the States of Illinois and Missouri for such purpose, to build a bridge across the Mississippi River at Quincy, Ill., and to lay on and over said bridge railway tracks, for the more perfect connection of any railroads that are or shall be constructed to the said river at or opposite said point, and that when constructed all trains of all roads terminating at said river, at or opposite said point, shall be allowed to cross said bridge for reasonable compensation, to be made to the owners of said bridge, under the limitations and conditions hereinafter provided. And in case of any litigation arising from any obstruction or alleged obstruction to the free navigation of said river, the cause may be tried before the district court of the United States of any State in which any portion of said obstruction or bridge touches.

SEC. 2. And be it further enacted, That any bridge built under the provisions of this act may, at the option of the company building the same, be built as a drawbridge, with a pivot or other form of draw, or with unbroken or continuous spans: Provided, That if the said bridge shall be made with unbroken and continuous spans, it shall not be of less elevation in any case than fifty feet above extreme high-water mark, as understood at the point of location, to the bottom chord of the bridge, nor shall the spans of said bridge be less than two hundred and fifty feet in length, and the piers of said bridge shall be parallel with the current of the river, and the main span shall be over the main channel of the river, and not less than three hundred feet in length: And provided also, That if any bridge built under this act shall be constructed as a drawbridge, the same shall be constructed as a pivot drawbridge with a draw over the main channel of the river at an accessible and navigable point, and with spans of not less than one hundred and sixty feet in length in the clear on each side of the central or pivot pier of the draw, and the next adjoining spans to the draw shall not be less than two hundred and fifty feet; and said spans shall not be less than thirty feet above low-water mark, and not less than ten feet above extreme high-water mark, measuring to the bottom chord of the bridge, and the piers of said bridge shall be parallel with the current of the river: And provided also, That said draw shall be opened promptly upon reasonable signal for the passage of boats, whose construction shall not be such as to admit of their passage under the permanent spans of said bridge, except when trains are passing over the same; but in no case shall unnecessary delay occur in opening

the said draw during or after the passage of trains.

Sec. 3. And be it further enacted. That any bridge constructed under this act, and according to its limitations, shall be a lawful structure, and shall be recognized and known as a post route; upon which, also, no higher charge shall be made for the transmission over the same of the mails, the troops, and the munitions of war of the United States, than the rate per mile paid for their transportation over the railroads or public highways leading to the said bridge.

SEC. 4. And be it further enacted, That it shall be lawful for the Chicago, Burlington, and Quincy Railroad Company, a corporation whose road has been completed to the Mississippl River, and connects with a railroad on the opposite side thereof, having first obtained authority therefor from the States of Illinois and Iowa, to construct a railroad bridge across said river, upon the same terms, in the same manner, under the same restrictions, and with the same privileges, as is provided for in this act in relation to the bridge at Quincy, Illinois.

SEC. 7. And be it further enacted. That the Keokuk and Hamilton Mississippi Bridge Company, a corporation existing under the laws of the State of Iowa, and the Hancock County Bridge Company, a corporation existing under the laws of the State of Illinois, be, and are hereby, authorized to construct and maintain a bridge over the Mississippi River between Keokuk, Iowa, and Hamilton, Illinois, of the same character, description, and construction as provided in this act for the bridges at Quincy and Burlington; and the said bridge, in its use and operation, shall be subject to the same restrictions that apply to said bridges at Quincy and Burlington by the terms of this act.

SEC. 13. And be it further enacted, That the right to ulter or amend this act, so as to prevent or remove all material obstructions to the navigation of said river by the construction of bridges, is hereby expressly reserved.

Approved, July 25, 1866.

Mr. Sims. There seems to be some intimation here that the War Department had undertaken to take some advantage of other persons desiring to build bridges, and I desire to ask you whether there was any intention or purpose on the part of the War Department to take advantage of anyone in taking any steps in this matter?

Col. Taylor. None whatever.

STATEMENT OF MR. C. R. JOY-Continued.

Mr. Jox. I would like to have about five minutes. I will be very brief. There is one thing that I wish to clear up, and that is the question of the intention of the water power company to build a bridge across the river. They never intended to build a bridge. I want to say that the citizens of Keokuk and Hamilton are responsible for their change in mind. Personally I have been working on it for a long time. I went to Boston and met some of the directors of the company there and urged the matter on them, and it has only been by persistent effort that we have interested them in it.

The CHAIRMAN. Who is going to build the bridge?

Mr. Joy. The power company.

The CHAIRMAN. Are they going to own it?

Mr. Joy. Yes, sir.

The CHAIRMAN. And you operate it?

Mr. Joy. Yes, sir; the Intercity Bridge Co.

The CHAIRMAN. Then the power company is only going to construct the bridge and lease it to you?

Mr. Joy. Yes, sir.

The ground where it is to be built is now bare. They have the organization to go ahead and build it. But we, representing the business interests of the two communities, are asking consent to the building of the bridge and the use of the dam across the river in connection with it.

The CHAIRMAN. But if the power company is going to build it and leave it to you, why not authorize the power company to do that?

Mr. Joy. If you wish to do that. This is a citizens' movement. It is a matter undertaken by them. The power company is not asking for the franchise. We, representing the people, want it. The power company did not want it, and we had to win them to it. They have, in order to save time, presented the matter to the War Department to get its consent to build the bridge.
The CHAIRMAN. That is, in their name?

Mr. Joy. Yes, sir.

The CHAIRMAN. It seems to me that the only additional authority you want would be for them to lease that to you for public-bridge

purposes.

Mr. Joy. Exactly. If we can get this consent quickly the bridge can be built immediately. We have not intended to be underhanded in any way. Our purpose was published in the Keokuk papers weeks ago, undoubtedly in the Burlington papers also. Mr. Wilkinson should be perfectly familiar with the whole plan. Now, if these men who are interested in navigation have let this thing slip by them during these six or more weeks, it is a marvel to me. I thought they were wide awake.

I have stated the need for haste. We can give you further evidence but delay destroys our cause. I have just a last request that I wish to make of the committee, and that is that it give this matter as prompt attention as possible, recognizing the emergency, and acting as

quickly as possible.

In regard to the proposition of the old bridge company to reconstruct their bridge, that is a promise only, while we have a bridge assured if permitted to use the dam. I do not want in any way to oppose the Keokuk & Hamilton Bridge Co.; they have served us for years. Also, if Mr. Marsh can bring the two railroads together it will be splendid, but we ask permission to take advantage of the epportunity we have to use as a bridge the dam already built.

Thereupon, at 4.30 o'clock p. m., the committee adjourned.

UPPER MISSISSIPPI RIVER IMPROVEMENT ASSOCIATION, OFFICE OF THE PRESIDENT, Burlington, Iowa, January 20, 1913.

Gen. W. H. BIXBY.

Chief of Engineers, United States Army, Washington, D. C.

MY DEAR GENERAL: I have just been informed that at the hearing of the Keokuk bridge matter held last Friday before the Committee on Interstate and Foreign Commerce, at which Lieut. Col. Taylor was present, that Mr. Marsh told the committee that he was authorized to represent me officially at the hearing. You can easily imagine my surprise when I received this information.

I am writing this to say that I had given no one authority to represent me officially at that hearing. If I had, the person so authorized would have had written credentials from me, which no one had. Therefore, the assumption to that effect by Mr. Marsh was entirely unauthorized.

With kindest regards and very best wishes, believe me,

Very cordially, yours,

THOS. WILKINSON.

WABASH RAILBOAD, St. Louis, January 3, 1913.

Hon. WILLIAM C. ADAMSON. Chairman Committee on Interstate and Foreign Commerce, House of Representatives, Washington, D. C.

MY DEAR SIR: I understand that your Committee on Interstate and Foreign Commerce has for consideration House bill No. 26672, for the completion of a bridge on top of the dam which has been built across the Mississippi River at Keokuk, Iowa.

The officers of the Wabash Railroad and its receivers feel the greatest interest in the development of this project. It is of immense importance to the Mississippi Valley and, of course, of very particular importance to the towns of Keokuk, Iowa, and Hamilton, Ill. In order that industries may locate on both sides of the river in the neighborhood of this great power development and get the full advantages arising from this development, it would be of very great advantage if the bridge were built as now proposed, and as is strongly ursed by the communities affected.

There is a bridge at Keokuk, owned by the Keokuk & Hamilton Bridge Co., but it is too light for modern railroad requirements and if used for railroad purposes will soon have to be reconstructed. It now renders service as a highway bridge and there is no reason why it should not be useful both as a high-way bridge and for electric street car use. My advocacy of the new bridge is not in order to put the existing bridge "out of business," but because I consider it a very necessary supplement to the existing facilities. The towns affected can not grow to their full extent unless these facilities are granted.

Very respectfully, yours,

FREDERIC A. DELANO.

WHITE COLLAR LINE. Davenport, Iowa, February 1, 1913.

Hon. W. C. ADAMSON.

Chairman Committee on Interstate and Foreign Commerce, House of Representatives, Washington, D. C.

DEAR SIR: The public hearing at the United States engineer's office in Rock Island last Monday was attended by 16 pilots, masters, owners, and navigators, a very fair representation of nearly all active interests.

All were sorry that a hearing had not been held before the work had progressed so far.

They finally agreed that the draw or channel span should be 300 feet wide instead of 175 feet, and Maj. Keller was asked to order such change.

The power company replied that they could not change their plans to give increased width of channel span, but said they were willing to build, install, and maintain such sheer or guide booms as navigation interests might require

to render the passage easy and safe.

At a second hearing held in the engineer's office Friday p. m. we agreed upon a plan for over 2,000 feet of booms, including detailed description of their construction and anchorage. Such booms will cost about \$25 per foot, besides the anchorage.

Capt. Streckfus, the writer, and Capt. Lancaster were the only persons present at this last meeting.

We will cheerfully accept the booms instead of a wider span, but insisted said booms are absolutely necessary for safe navigation.

At the first hearing Mr. R. O. Marsh was invited to submit his plans for a bridge across the river at the lower end of Keokuk.

As his plans were not ready we could only consider the location. The navigation interests did not make any serious objection to the location. The sentiment seemed to be that bridges are necessary, and while they all add to the difficulties and dangers of navigation, we must accept them, and there is no reason why a good bridge could not be built at this place. We do not want to assist or oppose either bridge project as against the other, but we are concerned and will use our best efforts to prevent either from building or placing any obstructive feature that can be avoided, and we feel confident we have the support of yourself and your honorable committee in this position. Very truly, yours,

W. A. BLAIR, Manager. .

HAMILTON, WARSAW & KEOKUK BRIDGE Co., Warsaw, Ill., January 31, 1918.

Hon. W. C. ADAMSON.

Chairman Committee on Interstate and Foreign Commerce, House of Representatives, Washington, D. C.

DEAR SIR: In regard to the bridge bills across the Mississippi River in the vicinity of Keokuk, Iowa, I beg leave to inform you that a public hearing of steamboat men, pilots, etc.. was held at the office of the Army engineers at Rock Island by Maj. Keller on Monday last. Pilots were present from the entire stretch of the river from St. Louis to St. Paul. The pilots and steamboat men were to a man opposed to the use of the dam as a bridge and the span of the fore bay at the power house, as planned by the power company.

span of the fore bay at the power house, as planned by the power company.

Maj. Keller informed those at the hearing that it was too late to prevent the construction of this bridge across the fore bay at the head of the power house, as it had already been authorized by the Army engineers and the War Department, and that all that could be done at this date was to secure advice from the steamboat men as to the details and changes in design which would be least harmful to navigation.

It was brought out at the hearing that there would be a cross-current in the fore bay with a velocity of 2 feet per second, which the steamboat men pointed out would compel them to go through the draw of the proposed structure at an angle, coming up to it sidewise. They demanded unanimously that if any such structure was allowed that the opening should be at least 300 feet clear in width, and that in addition that there be ample floating booms to prevent

the danger of boats being carried over next to the power house.

President Wilkinson, of the Upper Mississippi Improvement Association, was also present. Maj. Keller agreed before all present that he would recommend that the draw in the power company's structure should be 300 feet in the clear and that the additional booms would be required. However, the Army engineers had previously approved a draw of only 175 feet, and the power company is continuing its construction on the original plans in spite of the objections of the river men. They are now even laying concrete in the abutmets to the closed draw under the original plans providing for a clearance of only 175 feet.

The bridge that I am interested in was also brought up for discussion. The only objection of any weight brought against it was that, in the opinion of Maj. Keller, the necessity did not seem apparent to him. This, I told him, I considered a matter for Congress to decide upon and not the Army engineers.

I am inclosing for your information a copy of a letter and report recently given me by Maj. Keller relative to our proposed bridge, the detail report of which is made by Mr. Meigs, local Army engineer, at Keokuk. Mr. Meigs states, as you will see, "I do not believe this bridge will be any more of an obstruction than any other bridge across the river," but he objects to it on the ground that in his opinion a third bridge is not necessary, and he states that the power company's bridge is virtually authorized by the Secretary of War.

As a mater of fact, the Army engineers have already committed themselves to the extent of authorizing the power company's bridge, which they are constructing, without waiting for a franchise from Congress, and unless the Army engineers continued to uphold the actions of the power company, they would be put in a very awkward position. Under the circumstances, I do not think we have received fair treatment at the hands of the Army engineers, and I trust that you and your committee will view our bill on its merits.

Very sincerely.

RICHARD O. MARSH.

MEMORANDUM FOR MR. MEIGS.

United States Engineer Office, Rock Island, Ill., December 9, 1912.

1. I inclose herewith copy of H. R. 26559, authorizing the construction of a bridge across the Mississippi River, near Keokuk, Iowa, together with a letter of December 6 from Richard O. Marsh, and other inclosures referred to therein by him, as specified in the list below.

2. Please give this matter careful consideration, and report whether, in your opinion, the bridge in question should be built. If so, the precise location where it may be constructed with the least disadvantage to navigation should be indicated.

C. KELLER,

Major, Corps of Engineers.

Five inclosures: Two copies of H. R. 26559; one letter of Mr. Marsh; two blue prints.

[First indorsement.]

KEOKUK, IOWA, December 16, 1912.

- 1. I have carefully examined the plans for a Mississippi bridge at or near the mouth of the Des Moines, prepared by Mr. R. O. Marsh, and transmitted in yours of December 9, 1912.
- 2. It seems to me highly inadvisable to encumber navigation with this bridge when there is already one bridge at Keokuk only half used to capacity, and the much better bridge afforded by the concrete dam of the Mississippi River Power Co., virtually authorized by the Secretary of War, subject to the approval of Congress.

3. I have examined the site of the bridge, and I submit, with the two plans of the bridge company returned, a blue print from a recent survey in Novem-

- ber, 1912.

 4. The plan as proposed provides for a draw span of 175 feet clear about the middle of the river. All our experience points to this being a most undesirable location for a draw span, which should properly be situated near one shore or the other.
- 5. On the recent map referred to I have located the bridge shown in red, at a point about 2,400 feet above the mouth of the Des Moines. It might be located a few hundred feet north of this point, if desired, but it should not be located any nearer the mouth of the Des Moines, as there is a sharp bend beginning above the mouth of the Des Moines that would make it troublesome for descending boats. There is room enough to get in a curve off the bridge between the shore and the nearest railroad track, which is 428 feet from the shore line. This curve and the railroad tracks are indicated on the map.
- 6. At the point selected, the river follows the Iowa shore and has done so as long as I can recollect, though the deepest water at present is further out. The contraction of the river by the long fill proposed will probably scour out the river bed and make the channel depths greater than shown on the map.
 - 7. The elevations given for the bridge seem somewhat questionable, as follows:

	Elevations.	
•	Our records.	Bridge company.
ow water at Keokuk	Feet. 484.65	Feet.
ope to bridge site. ow water at bridge. igh water at Keokuk.	. 90 483. 75 504. 28	• • • • • • • • • • • • • • • • • • • •
ope to bridge site. igh water at bridge ottom of bridge ottom of bridge	. 90 503. 38 508. 00	

The waterway proposed seems adequate, being 2.540 feet. The bridge at Keokuk is 2,200 feet. This is neglecting the small span near the Illinois shore.

- 8. I would prefer to have the west draw rest 100 feet from the shore line, with a short span next the shore in order to give room for descending boats to maneuver. This draw rest should be connected with the shore by a floating boom, as shown on the map, herewith, in red.

 9. If constructed in the place and of the dimensions proposed on the map sub-
- mitted herewith. I do not believe this bridge will be any more of an obstruction than any other bridge across the river, but I object to it on the grounds already given. So far as I can learn, this bridge is being promoted as a private enterprise, probably for sale to some railroad or railroads in the future, and it will . be superfluous and unnecessary at this time.

Five inclosures: One copy H. R. 26559; one letter of R. O. Marsh; three blue prints.

> M. MEIGS. United States Civil Engineer.

United States Engineer Office, Rock Island, Ill., January 17, 1913.

Mr. R. O. MARSH.

Hotel Willard, Washington, D. C.

DEAR SIE: Referring to your night letter of January 16, I inclose herewith

copy of a day letter just sent you.

It is evident that we did not fully understand each other. My intention was to withdraw further opposition to the passage of your bill, and in my report thereon I have raised no additional objections. I have repeated those already raised, but beyond recommending a showing of necessity by your company I do not suggest disapproval.

This is as far as I felt justified in going in the light of a report on your

plans, submitted by Mr. Meigs on December 16, copy of which is herewith.

With a change to the shore location for the navigation opening, recommended by Mr. Meigs, a lift span of the same available width as that at Keithsburg, 220 feet, and an adequate sheer boom, your bridge would be free from any objection, save that it is an additional obstruction to navigation, which plainly should not be created unless there is an undoubted public necessity for it.

To enlighten the navigation interests as to this and other matters, I have issued invitations to a hearing at this office at 10 a. m. on January 27. Should you care to attend, it may then be possible to secure a definite agreement to your plans from all concerned. On the other hand, there is no absolute necesalty for your presence.

Very respectfully,

C. KELLEB. Major, Corps of Engineers.

Two inclosures.

WAR DEPARTMENT. OFFICE OF THE CHIEF OF ENGINEERS, Washington, February 5, 1913.

Hon. W. C. ADAMSON,

Chairman Committee on Interstate and Foreign Commerce,

United States House of Representatives.

SIR: 1. I have the honor to inclose herewith for your information copy of a report of a public hearing which was held at the United States engineer office, Rock Island, Ill., January 27, to consider certain matters relating to bridges across the Mississippi River, especially matters relating to the proposed bridges across the Mississippi River in the vicinity of Keokuk, Iowa. This public hearing is the one which was referred to in Col. Taylor's testimony when he appeared before your committee on January 17.

2. A table giving information in regard to all of the drawbridges across Mississippi River between Minneapolis, Minn., and the mouth of the river is also inclosed. Of the 25 bridges listed in this table, 15 have draws of less width than would be provided in the bridge which would be formed by the extension of the Mississippi River Power Co.'s dam across the forebay. Of the 10 which have draws with greater widths, three, viz, those at Reeds Landing (mile 78), Prairie du Chien (mile 207), and North McGregor (mile 208), are of the pontoon draw type, a type which is not applicable to the location at Keokuk, and a type which is necessarily extremely slow in operation and which, it is believed, would ordinarily be a greater obstruction to navigation than a bridge with a narrower draw which could be operated much more quickly. The draw opening of the Hamilton and Keokuk Railroad bridge, a short distance below the new lock, is 167.5 feet.

Very respectfully,

W. H. RIXRY.

Chief of Engineers, United States Army.

Copy of inclosures 688 and 689 accompanying. One inclosure.

> UNITED STATES ENGINEER OFFICE. Rock Island, Ill., January 28, 1913.

From: Maj. C. Keller, Corps of Engineers.

To: The Chief of Engineers, United States Army.

Subject: Report of public hearing in re proposed bridges at Keokuk, Iowa.

1. In compliance with the directions of your telegram of this date, I desire to say that yesterday, January 27, at 10 a.m., an informal hearing to consider certain bridge matters was held at this office. Notices concerning the hearing had been mailed to all known to be interested and the local newspapers throughout the limits of the district had been asked to publish a notice of the hearing as a news item. A copy of the notice is attached, upon which is noted a list of the names and, so far as known, of the occupations or affiliations of those in attendance.

2. It will be seen that the notice plainly stated that it was a purpose of the hearing to consider the proposed bridges at Keokuk, and most of those present came with this in view. My original plan had been to make the hearing more or less informal and to exhibit to all present the plans of the two proposed bridges and to explain and discuss them at length until all fully understood what was proposed. No attempt was therefore made to secure a verbatim report of the proceedings, nor is this considered necessary, since there was very little formal discussion, such as a stenographer could have been enabled to record. The hearing lasted about two hours and fully disclosed the attitude of the most important navigation interests toward both bridges. All navigators present were disposed to regard the bridge proposed to be built below Keokuk as embodying a serious menace to navigation, for reasons already given by me. The portion of the river within which it is desired to build the bridge is not at present of such stable regimen as to justify the belief that any low bridge, no matter how favorable its location, will continue to be easy of passage. Navigators were, however, disposed to attach some weight to the suggestion that after the completion of the dam the quantity of moving sand below it would be so diminished as to nullify this objection; but, in any event, it was agreed that the bridge ought not to be built until it had been proved to be a public necessity and not a speculation.

3. A greater amount of discussion took place concerning the proposed extension of the dam. The initial attitude of the leading navigators was not unfavorable to the extension as now authorized, but before the meeting came to a close, ideas had changed, and the spokesman for the navigators, Capt. Blair, of Davenport, finally said that he believed that a 300-foot opening should be provided. The meeting adjourned with the understanding that I was to bring the matter to Mr. Cooper's attention and to secure his views. This I yesterday did by means of the telephone. Mr. Cooper has stated, without qualification, that a navigation opening of 175 feet is as much as the circumstances seem to warrant, that a 300-foot opening is absolutely out of the question, and that an opening of 220 feet, which is equal to that now provided at the Keithsburg bridge, would cost his company at least \$40,000 additional, and that, rather than exceed the original agreed width of 175 feet, the project would be abandoned, and this in the face of the fact that a number of the plers for the bridge extension of the

dam have already been completed.

4. After learning of Mr. Cooper's decision, I decided to communicate with the objectors by letter, my idea being that the 175-foot opening might be acceptable. provided longer booms than those shown on the original drawing were agreed to in advance. Mr. Cooper has expressed his willingness to furnish any booms that may be regarded as necessary, and it was originally understood that those shown on his plan for the bridge might not conform to the final requirements, which would depend upon actual use by navigation and its subsequently developed necessities. With this in mind, I originally believed, and still do, that an opening of 175 feet wide, amply protected by floating timber booms, will be as easy of navigation as any bridge could possibly be, and I see no reason for changing my opinion upon the subject. At the spot where the bridge is to be built it is plainly necessary that, whether the bridge exists or not, navigators proceed with caution, keeping their boats under full control. It is not conceivable how a boat which has safely gotten through the opening in the ice fender can, in the short additional distance, get out of hand, and this applies with equal force to boats bound upstream. While the protection of the interests of navigation is the first consideration, it does not seem proper to support navigators in unreasonable demands. Nothing which occurred at the hearing gives me any reason for changing my views already expressed, and I believe that the bridge may safely be built under the approved plans, a copy of which is, for convenience, furnished herewith.



1. A meeting will be held at the United States engineer office, Rock Island, Ill., at 10 o'clock a. m. Monday, January 27, 1913, to consider proposed railway bridges across the Mississippi River—

First. On the big dam at Keokuk.

Second. An ordinary swing or bascule draw bridge, to be located at some point between Taber's saw-mill at Keokuk and the mouth of the Des Moines River.

2. Bills for authorizing these bridges are now pending in Congress, and the attendance and opinions of navigators and of those interested in navigation are earnestly desired.

3. At the meeting will be taken up incidentally the advisability of permitting the bridge companies (C., M. & St. P. Ry. Co.) to shorten their sheer booms or guide fences at the North La Crosse, McGregor, and Sabula Bridges.

C. Keler, Major, Corps of Engineers.

List of parties attending public hearing at Rock Island, Ill., at 10 a. m.. January 27, 1913, in re proposed bridges at Keokuk: W. A. Blair, Davenport, Iowa, White Collar Line: John Streckfus, Rock Island, Ill.. Streckfus Line Steamers; John Streckfus, jr., Rock Island, Ill., Streckfus Line Steamers; W. H. Lamont. Rock Island. Ill.. White Collar Line; Thomas Wilkinson, Burlington, Iowa; Orrin J. Thompson, Davenport, Iowa, pilot; S. R. Dodge, Davenport. Iowa, pilot; Chris. Schricker, Davenport, Iowa, pilot; Jake Richtman, Nauvoo. Ill., pilot. Fowler Manning, St. Louis, Mo., general traffic manager, Streckfus Line; Joe Young, Davenport, Iowa, pilot; William Dipple, Davenport, Iowa, pilot; P. B. Lancaster, Le Claire, Iowa, pilot; Hugh McKenzie, Keokuk, Iowa, pilot; R. O. Marsh, Warsaw, Ill.; John De Witt, representing Keokuk Industrial Association, interests of city of Keokuk, and of the Inter City Bridge Co. of Keokuk.

Mississippi River drawbridges between Minneapolis, Minn., and the mouth of the river.

Distance from C., St. P., M. & O. R. R. bridge at St. Paul.	Locality.	Kind.	Length of channel span or draw opening.
0.00	C., St. P., M. & O. R. R. C. & G. W. R. R. Belt Line	Railroaddodo	180
10.93	St. Paul Fork	Railroad and highway	100
	Hastings (C., M. & St. P.)		
78. 00		do	154
117. 70 142. 25	Lacrosse	do .	160
144. 25	do	Highway	200 350
208.00	North McGregor	dodo	370 156
309. 47 326. 87	Sabula	do	160.
362.32 363.75	Rock Islanddo	Railroad and highway	162
116.75	KeithsburgBurlington	l do	160
462, 20	Fort Madison	Highway	163
520.40	Quincy	do	152
539. 27	Hannibal		K 147
551.59		do	200



-. · . • • .



· • • .] . • . •

